Timeline Editing User Guide

This manual is revision B

Copyright © Quantel Ltd 2001-2014

Contents

Getting Started 1-1

Introduction 1-2

Interface Areas 1-2

The Desktop 1-2
The Application Bar 1-3
- Enabling/Disabling Desktop 1-3
- Applications 1-3
- Media Bins 1-3
- Render Format 1-3
- Output LUT 1-4
- Display Format 1-4
- Aspect Ratio Boxes 1-4
- Enabling/Disabling Video and Audio Output 1-4

Media Bins 1-5
- Bin Columns 1-6
- Searching Bins 1-6
- Wildcards 1-7
- Sort by Ascending/Descending 1-7
- Settings Bin 1-7

Web Tools 1-8

Editing Modes 1-9

Desktop Mode and Floating Clips 1-9
Flat Timeline Mode 1-9
Multi-layer Timeline (MLT) Mode 1-9
Stereo 3D Timeline 1-9
MLT FX Menu 1-9

The Edit Application 1-10

Opening the Edit Application 1-10
Clearing and Resetting the Timeline 1-10
- The Timeline 1-11
- The Edit Window 1-11

Understanding the Timeline 1-12

The Cursor 1-12

copyright © Quantel Ltd 2001-2014
August 2014 ref 2140-57-020 B

Cursor Controls 1-12
Centre Play Mode 1-12
Scaling Tracks 1-13
Tracks Reduced 1-13
Using the Track Scale Line 1-13
Using the Track Filter Boxes 1-14
Reset to Default 1-14
Zooming in on the Timeline 1-14
Zoom In 1-15
Zoom Out 1-15
Video and Audio Track Naming 1-16
Timeline Clip Segment Information 1-16
Enabling Segment Thumbnails 1-16
Colours and Highlights 1-17
Muting and Soloing Tracks 1-18
Enabling and Disabling Track Boxes 1-18
Revealing 'Hidden' Menus 1-18
Reveal Left Hidden Menu 1-18
Reveal Right Hidden Menu 1-19

Set Global Parameters 1-20
Set Total Edit Length (Dur) 1-20
Set Frame Rate 1-20
Set Destination (Start) Timecode 1-21
Set Display Format 1-21
Set Video Format 1-21

Placing Clips on the Timeline 1-22
Using the Edit Window 1-22
Using the Timeline Tracks 1-22
To Insert ALL Video and Audio Tracks 1-22
To Insert ONE Video or Audio Track 1-23
Using the 'Edit' Tab 1-23
Using the Add Audio/Add Video Buttons (Add Tracks) 1-23
Performing an Insert Edit 1-24
Synchronising Cursor Positions ('Sync') 1-25
Use the Reel 1-26
Using the Floating Clip 'More' Menu 1-26
Moving Clips between Edit and Effects 1-27

The Edit Window 2-1

Edit Window Functions 2-2

The Active Area 2-2
Clip Navigation 2-3
- Jog 2-3
- Shuttle 2-3
- Play/Pause 2-3

Marking a Section 2-4
- In and Out Points 2-4

Resizing the Edit Window 2-5
Create a Copy 2-5
Timecode Display 2-6
Safe Area Display 2-7
Pan & Scan 2-7

The Timeline 3-1

Timeline Features 3-2

Hidden Menus 3-4

Access Left Hidden Menu 3-4
Left Hidden Menu Tools 3-4
- Video format 3-5
- Audio Grouping 3-5

Access Right Hidden Menu 3-7
Right Hidden Menu Tools 3-7
- Segment Levels 3-7
- Track Levels 3-7
- Waveform Display 3-8
- Compressor/Limiter 3-8
- Equalizer 3-8

Reel (Storyboard) 3-9

Inserting, Moving and Removing Clips 3-9
- Insert 3-9
- Move 3-9
- Remove 3-10

Copying Clips to the Desktop 3-10
Changing to 'Frames' View 3-10
Navigating and Resizing 3-10

copyright © Quantel Ltd 2001-2014

Bank 3-11

Depositing and Displaying Clips in the Bank 3-11
- Expanding the Bank Display 3-11

Moving Clips within the Bank 3-12

Emptying the Bank 3-12

Audio/Video Stretch 3-13

Stretching a Clip 3-13

A/V Stretch Options 3-13
- Type of Stretch 3-14
- Interpolation Process 3-14
- Field 3-14
- Reverse 3-14
- Result Scan 3-14
- Render Format 3-14
- Box/Cut 3-15
- Audio 3-15

Using Keyframes to Stretch (Profile Graph) 3-15
- The Profile Graph 3-15
- Inserting Keyframes 3-16
- Profile Stretch Options 3-16

Rendering and Saving a Stretch 3-17

Video Stretch Techniques 3-18
- Fit to Fill 3-18

VO (Voice Over) Function 3-19

Recording a Voice Over 3-19

Using Reference Clips 3-20

Video Guide (Shot Matching) 3-20

Highlights 3-21

Enable Highlights 3-21
- Blank Frame Indicator 3-21
- Highlight Changes 3-21

Customise Highlights 3-21
- Change Highlight name 3-22
- Change Highlight Colour 3-22

Highlight Changes 3-22

Highlighting Segments 3-23
- Highlighting an Individual Segment 3-23
- Highlighting Multiple Segment 3-23

Applying a Process to Highlighted Segments 3-24

Deleting a Highlight 3-24

Clip Logging 3-25
Overview 3-25
Viewing Existing Events 3-25
Editing Existing Production Notes 3-26
Creating New Events 3-26
Logging Roles (Server Products Only) 3-27
Deleting a Clip Log 3-27

Video Transitions 3-28
Transition Types 3-28
Cuts 3-28
Dissolves 3-29
Wipes 3-30
Custom Transitions 3-31
Adding New Custom Transitions 3-31
Rendering a Transition 3-32

The Quick Fix (<F8>) Menu 3-33
White Balance 3-33
Video Level 3-34
Tracker 3-34
Render and Commit 3-35

Templating 3-36
Template Designer Mode 3-36
How to Create a Template 3-36
Template Designer Menu Features 3-37
Template User Mode 3-38
Template User Menu Features 3-39

Third Party Graphics (Option) 3-40
Overview 3-40
Add a Third Party Template 3-40

Pan & Scan 3-42
Edit Window Functions 3-42
Pan & Scan Menu Options 3-42
Saving and Transferring Settings 3-43
Timeline Track Controls 3-43
Stereo3D Functions 3-44

copyright © Quantel Ltd 2001-2014

Play-out Preview 3-45
Display Format Settings 3-45
Aspect Ratio Settings 3-45
Enable Video/Audio Display 3-46
Box/Cut Settings 3-46
- Box 3-46
- Cut 3-47

Editing Tools 4-1

Marking a Section 4-2
Selecting the Current Segment 4-2
Select Using a Lasso 4-2
Marking In and Out Points 4-2
Selected Segments 4-3
Checking, Playing and Deleting Marks 4-3

The Blue 'Lift' Menu 4-4
Lift Tool 4-4
Cut Tool 4-4
Copy Tool 4-5
Clear Tool 4-5
Third Party Graphics Templating (Option) 4-5

The Yellow 'Move' Menu 4-6
Selecting Segments 4-6
- Select a Single Segment 4-6
- Select Multiple Segments 4-6

Move Menu Tools 4-7
- Move Tool 4-7
- Copy 4-7
- Slip 4-7
- Delete 4-9
- Clear 4-9

Editing Styles 4-10
Docked Editing 4-10
Locked Clips 4-11
- Locking Floating Clips 4-11
- Locking Floating Clips to the Timeline 4-11

Cursor to Cursor Editing 4-11

How to use 'Cursor to Cursor' Editing 4-11
3 Point Editing 4-13
Simple 4-13
Back Timing 4-13

MLT Editing 4-15
Starting an MLT Edit 4-15
Adding Video Tracks 4-15
Placing Clips on Specific Tracks 4-16
Moving or Copying Between MLT Tracks 4-16

Trimming 4-17
Topping and Tailing 4-17
Trim Functions 4-17
Left Trim 4-18
Centre Trim 4-18
Right Trim 4-18
Complex Trims 4-18
Using the Trim/Transitions Window 4-20
How to Access the Trim/Transition Window 4-20
How to Use the Trim/Transitions Window 4-20
Split Edits 4-21
Transitions 4-21

Video/Audio Sync 4-22
'Show Sync' Indication 4-22
Sync Lock 4-22
Correcting Broken Sync 4-23

Clip Processing 5-1

Rendering 5-2
When to Render Clips 5-2
How to Render 5-2
Mixed Render Formats 5-2
Auto Render (<F1>) 5-3
Unrender 5-4

Soft-Mounting 5-5
Relinking Soft-Mounted Media 5-5

copyright © Quantel Ltd 2001-2014

Localise 5-8
Why Localise Clips? 5-8
What Happens 5-8
Setting Tail Frames 5-8
How to Localise 5-8

Publishing Clips 5-9
Why Publish Clips? 5-9
What Happens 5-9
Prerequisites 5-9
How to Publish 5-10
How to Publish to a Placeholder 5-11
Cancel Publish 5-12
Flatten Publish 5-12
Publish validate (Check) 5-12
- Bad Media 5-12
- Missing Media 5-12
- Failed Audio 5-12

Save 5-13
How to Save 5-13

Appendix A–1

About This Manual A–2
Notices A–3
- Maintenance A–3
- Conventions Used A–3
- Text A–3
- Trademarks A–4

Disclaimer A–5
Helpdesk & Web Support A–5
- 24 Hour Helpdesk A–5
- Website & Downloads (manuals, drivers, plugins & software) A–5

Appendix B A–6
Keyboard Shortcuts A–6
- Configuration Window A–7
- Layout A–7
- Editing A–7
- Audio A–9

Navigation & Playback....A–9
Undo & Redo....A–10
Bins....A–11

Appendix C **A–12**

Menu Functions & Colours....A–12
Mouse & Pen Functions....A–13
Right-click or <Alt> + Tap....A–13
Undo & Redo....A–13

copyright © Quantel Ltd 2001-2014

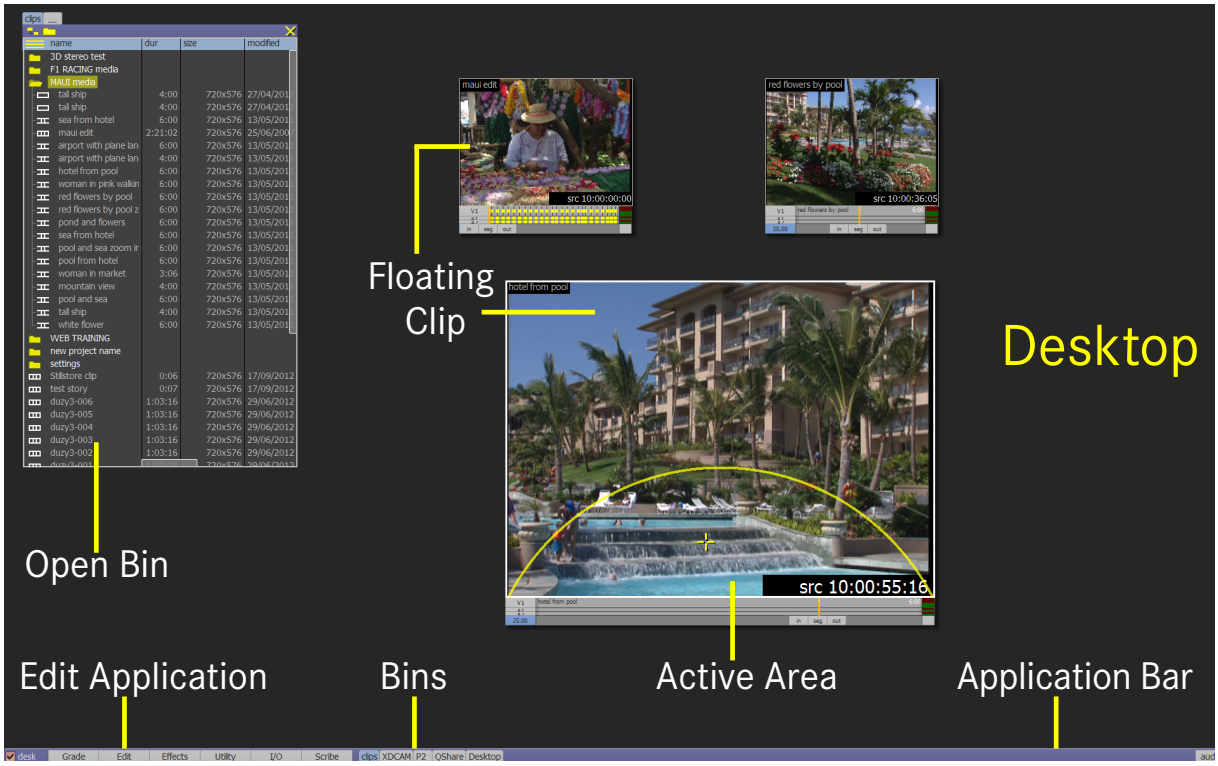
Getting Started

Introduction

This document describes a snapshot across the capability of the Quantel Edit environment. Available features may vary depending on the product.

The Quantel Edit Application is a diverse environment offering a number of menu layouts, track styles, editing techniques and resolutions. When using Quantel editing software clips can be edited on the desktop, on a single video track (ie a 'flat' timeline) or, on some Quantel products, multiple video tracks (ie a 'multi-layer' timeline). This guide provides information about editing using the timeline within the Edit Application.

Interface Areas



The Desktop

The desktop provides a blank area that can be used to preview material, mark 'in' and 'out' points and assemble shots before editing, publishing or inserting into a playlist ready for playing-out. The desktop can be used with or without an application being open.

Clips can be taken from any bin and placed directly onto the desktop area. Clips placed on the desktop are referred to as Floating Clips. They can be assembled into sequences, dropped into another application, or published back to the server.

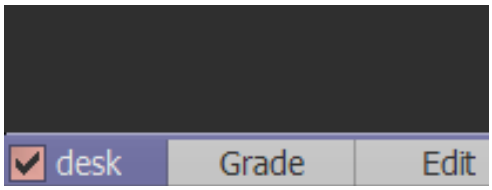
See the Desktop Editing Guide for more information about the Desktop area and how to edit with Floating Clips.

copyright © Quantel Ltd 2001-2014

The Application Bar

The Application Bar runs along the bottom of the interface and displays the available applications and bins. Available applications and bins vary depending on the software or product in use.

Enabling/Disabling Desktop



Tick the **desk** check box on the left of the Application Bar to toggle the desktop's contents on and off. For example, when the **desk** check box is deselected, any Floating Clips that are open on the desktop are hidden.

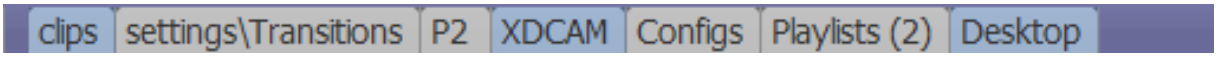
When the **desk** check box is selected, the desktop content is made visible again.

Applications

Each available application for the product being used is featured on the Application Bar. To open an application, click on the corresponding tab on the Application Bar. The corresponding tab highlights pink when an application is in use.

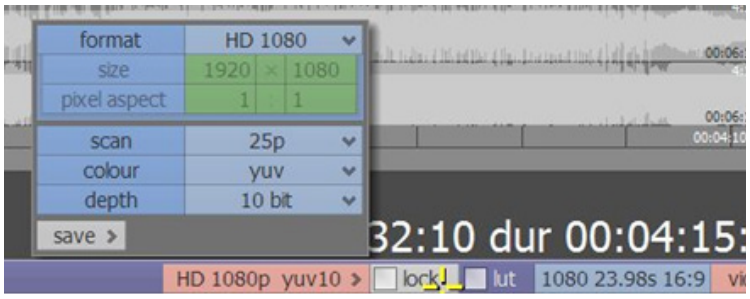
Applications on the application bar have square corners whereas bins have rounded corners.

Media Bins



Each available bin for the product being used is featured on the Application Bar. To open a bin, click on the corresponding tab on the Application Bar. The corresponding tab highlights blue when a bin is in open.

Render Format



Timeline edits are usually rendered at the clip's native resolution, but where there are mixed resolution clips, transitions, fades, or an MLT FX DVE or stereo process applied, then the render format needs to be decided.

This is done via the render format pop-up on the Application Bar. The render setting can be locked to the current video format setting by ticking **lock**.

Output LUT

The **lut** tick box enables a LUT to be applied to the live output.

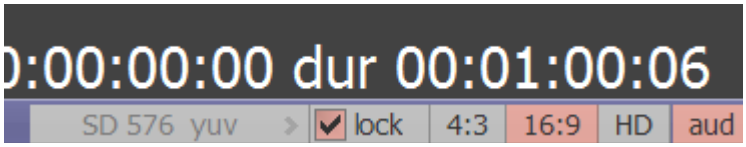
This LUT is output to the monitor or tape and does not affect the original media or the Edit Window image.

When the **lut** tick box is enabled, a scroll box appears on the Application Bar. Use this scroll box to select the required cube. Press the **R** box to refresh the list.

Display Format

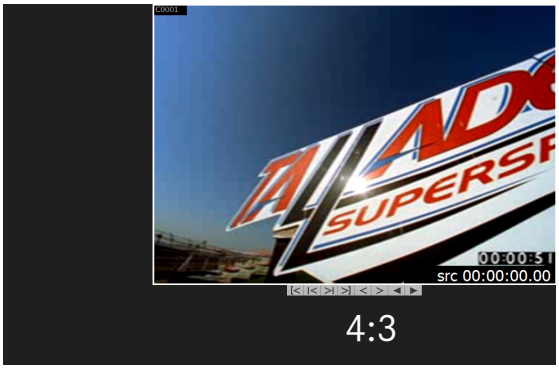
The blue box on the right of the Application Bar shows the specific output/play preview format currently being used. To set the display format, press on the Display format box and choose from the options available.

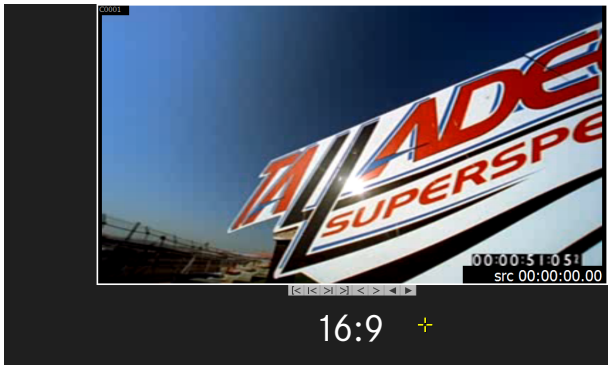
Aspect Ratio Boxes



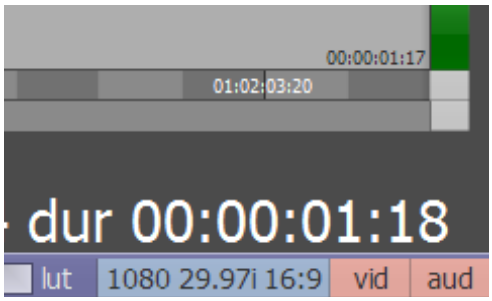
When using a software product (ie with no output card), three additional boxes are displayed: **4:3**, **16:9** and **HD**.

These boxes are for setting the play-out aspect ratio when connected to a clean output display. When one of the options is selected, the Edit Window changes size and shape to reflect the chosen aspect ratio.





Enabling/Disabling Video and Audio Output



At the bottom-right of the Application Bar there is a **vid** box and an **aud** box. These control the video and audio output. If the **vid** box is enabled it highlights pink and video is output to a display monitor (if available). If the **aud** box is enabled it highlights pink and audio is output to external speakers. To enable/disable the video or audio output simply click on the **vid** and/or **aud** box.

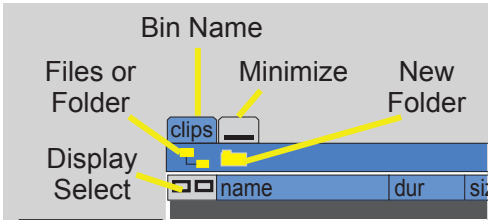
Enabling/disabling the 'vid' and 'aud' boxes have no effect on publishing or saving a clip.

copyright © Quantel Ltd 2001-2014

Media Bins

Bins are used to access local and network media libraries, and the sQ Server (if applicable). Bins can be used to search for, preview and load material onto the desktop or into available applications. Media can also be saved or published back into the bins.

To open a bin click the corresponding tab on the Application Bar, ie **clips** (containing local video and audio clips), **server** (containing all server held material), or **desktop** (access to media located on external devices or network locations). Bin availability depends on whether the product being used is standalone or server connected and also on the application currently being used.



The bin can be minimised by clicking the minimise tab at the top-left of the bin. Hitting the <Esc> key shows/hides all minimised bins. To close a bin click the X in the top-right of the bin.

In the bins, clips can be displayed using clip metadata or browse miniatures by clicking on the Display Select icon (see above diagram). Alternatively a combination of both can be displayed by clicking and dragging up or down on the Display Select icon.

Displays clip miniatures and clip metadata

Displays clip miniatures

Displays clip metadata (default character size)

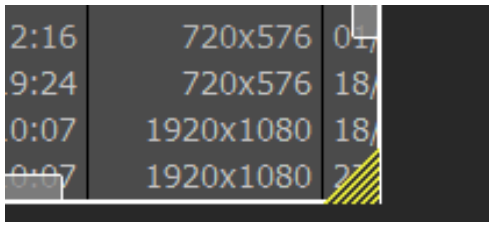
Displays clip metadata (smaller character size)

Clips can also be displayed using a folder structure by clicking on the Files or Folder icon (see above diagram). Clicking the New Folder icon (see above diagram) creates a new folder.

Folder view

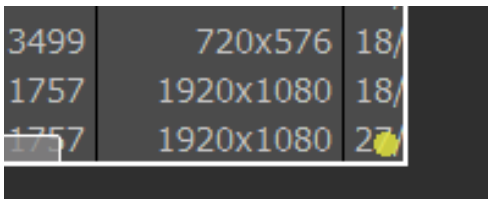
File view

Create new folder



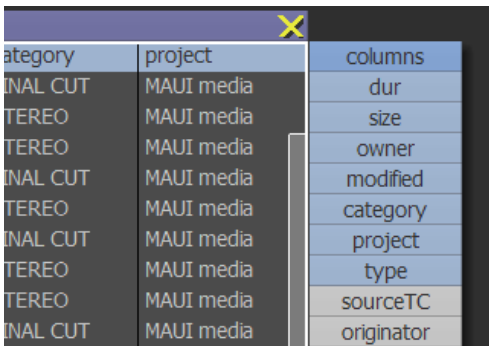
To resize a bin hover in the bottom right corner. Click and drag on the yellow resize icon that appears until the bin is the required size.

Re-position a bin by clicking on any blank area within the bin and then dragging it to the required position.



Lock a bin's position by holding <Ctrl> and clicking the resize icon. A yellow dot appears indicating that the bin is locked. Click again to unlock.

Bin Columns



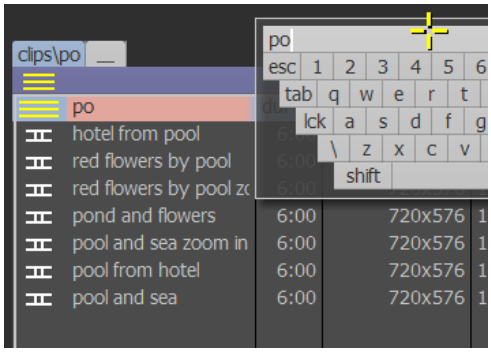
Which columns are visible and the order in which they are displayed within each bin can be changed according to user preference. The Columns menu can be displayed by hovering the cursor outside the top-right of the bin, clicking **columns** then selecting which columns to be visible in the bin.

The order in which each column appears in the bin (except the **name** column) can be rearranged horizontally by clicking on the column title and dragging to a new position.

Searching Bins

Any column can be used to define a search. To search a column by name, do the following:

1. Select the blue **name** box at the top of the clip title column.
2. A soft keyboard appears. Type the required clip name using either this or the external keyboard and click **end** or hit <Enter>.

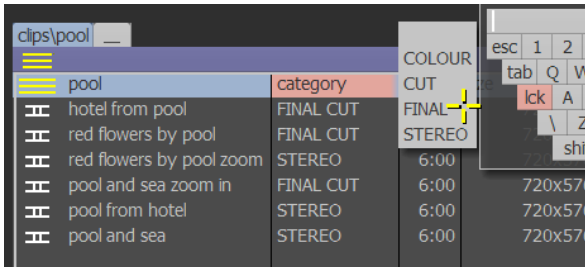


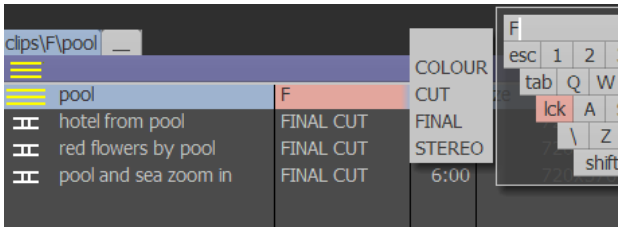
The search is not case sensitive.

The system filters the bin's content in real time as each letter is typed.

If spaces are used in the clip name, the search is applied to the beginning of any of the words used in the title. For example, a search for 'pool' would find 'hotel from pool' but not 'hotelfrompool'.

3. Additional columns can be used to further filter the bins content until the desired clip(s) is located. '\' is used to indicate the presence of multiple searches on the bin tab (see screenshots below).





copyright © Quantel Ltd 2001-2014

4 To clear all search filters, double-click on the bin's name tab (eg **clips**).

Wildcards

Wildcards can be used to aid the searching process.

Wildcard	Description
&	When two or more keywords are typed separated by an ampersand (&) it searches for corresponding words either of which appear in the title. For example, typing PRESIDENT & AIRPORT finds President Arrives at Airport and also finds London's Third Airport.
?	'?' is a single character wildcard, for example ?ART finds Cart but not Art or Start.
*	'*' is a multiple character wildcard, for example *ART finds Art, Cart, Start, Starter and Artwork. '*' wildcards can be used before and after characters, for example *Art* finds Start, Starter, Party etc. '*' is also useful for finding common misspellings eg '*TERS' for 'Reuters'.

Sort by Ascending/Descending

Columns can be used to sort the contents of a bin into ascending or descending order. To do this, move the cursor over the right side of a column's title box and click on the icon that appears.

There are three sort types available:

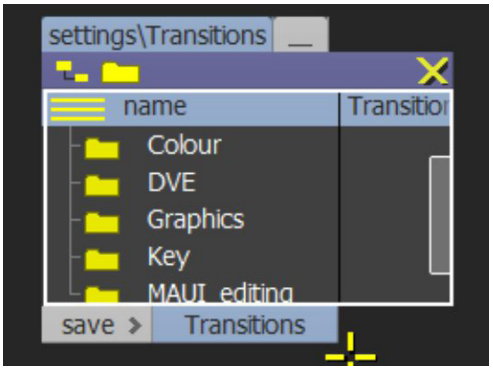
△ Ascending

▽ Descending

◇ Default

Sorting is alphanumeric and can be combined with a search filter in any additional columns. Only 1 column sort can be applied to a bin at any one time, unlike searches which can be on multiple columns.

Settings Bin



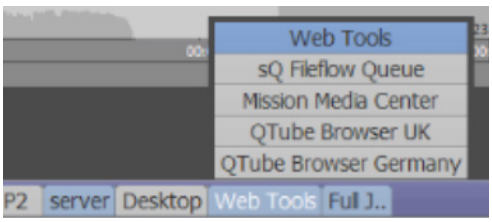
The Settings Bin can be used to transfer effects settings between projects. The settings that can be saved depend on the current application and menu, eg MLT FX has different Settings Bin options to Edit.

Settings clips can be dragged from the Settings Bin onto the timeline to apply the settings to the clip.

For more details about the various bins available and their full functions see the Media Bins User Guide.

Web Tools

Web Tools is an additional option and is therefore not available on all systems.



The Web Tools tab on the Application Bar opens an embedded web browser. It provides instant and in-application access to a preset range of web addresses. The range of websites available is configurable by system administrators in an XML file.

The location of the XML configuration file is determined by the new 'Browser Settings' option in the Settings menu. It can be set to a network location so multiple machines offer the same web applications.

The Web Tools tab is intended to provide quick and easy access to web-based applications such as sQFileFlow, Mission MediaCentre or the QTube Browser. When working with sQ Fileflow it is now possible to drag and drop clips from the server bin directly into the sQ Fileflow queue.

This first release of Web Tools does not support websites that require authentication.

copyright © Quantel Ltd 2001-2014

Editing Modes

Desktop Mode and Floating Clips

The desktop is useful for arranging clips into a sequence (the Edit Application does not have to be open to use the desktop). Clicking on a clip's title from within a bin and dragging it onto the desktop creates a Floating Clip. This is a miniature editor that allows clips to be viewed and assembled on the desktop. Clips can be placed onto the desktop temporarily before being dropped on the Edit timeline, back into the Clips Bin or into another application.

For more information about the desktop editing mode and Floating Clips, see the Desktop Editing User Guide.

Flat Timeline Mode

The flat timeline mode allows clips to be loaded from a bin or the desktop directly onto a single video track on the timeline. There are a number of timeline tools and functions available for editing video and audio content.

The flat timeline is dictated by product. MLT edits can be displayed on flat timeline products as flattened clips. They can be re-edited, published and then expanded by MLT enabled workstations.

Multi-layer Timeline (MLT) Mode

This mode allows multiple video tracks to be created on the timeline (indicated by **V1**, **V2**, **V3**, **V4** etc). The multi-layer timeline shares the same functions as the flat timeline, but has additional features and tools.

Stereo 3D Timeline

The stereo timeline allows stereo clips consisting of both left and right eyes to be edited in the same way as mono clips. A blue line across the clip segment indicates that the clip is stereo. Most editing functions in this guide can be used in conjunction with specific 3D functions.

See the Stereo3D User Guide for details about the stereo timeline.

MLT FX Menu

The MLT FX menu is an effects suite embedded directly within the Edit Application. Processes can be easily applied to individual clip segments, whole video tracks or the whole timeline. To open the MLT FX menu click the **mlt fx** box in the bottom-left of the Edit Application. To close the MLT FX menu, click **mlt fx** again. Note that some keyboard editing shortcuts do not work when **mlt fx** is open.

See the MLT FX User Guide for full details.

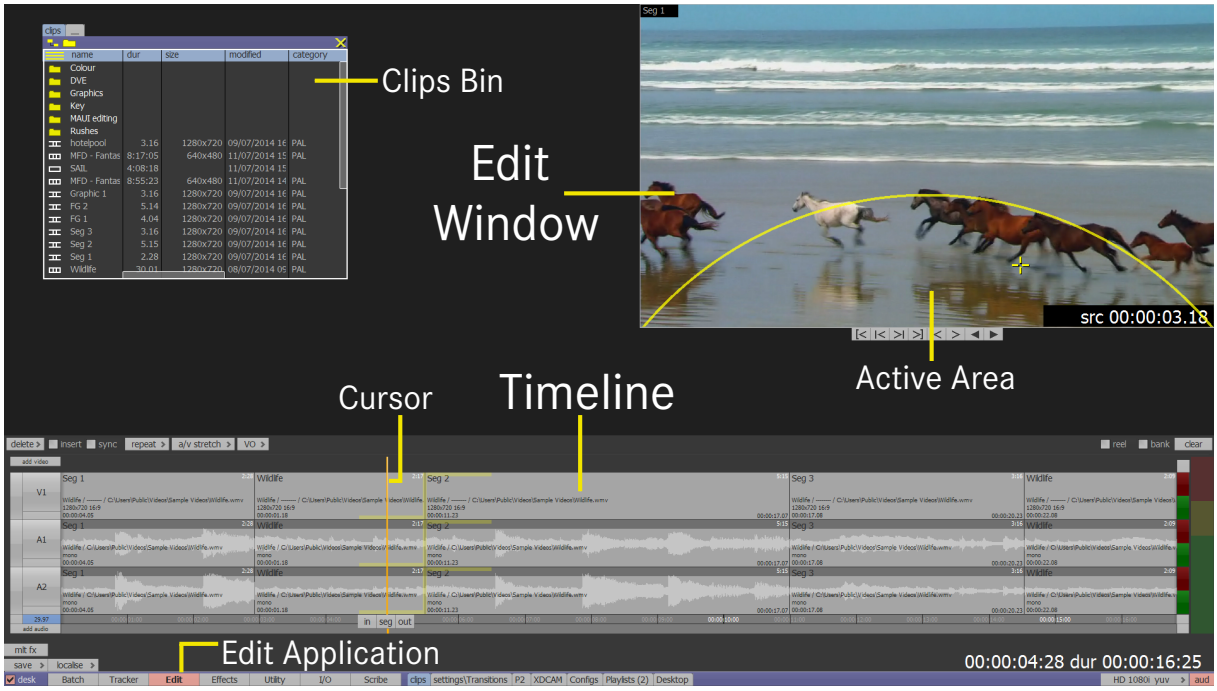
The Edit Application

Opening the Edit Application

To open the Edit Application navigate to the Application Bar located at the bottom of the interface.

Click the **Edit** tab.

When the **Edit** tab is selected, a timeline area appears, spanning the width of the interface.

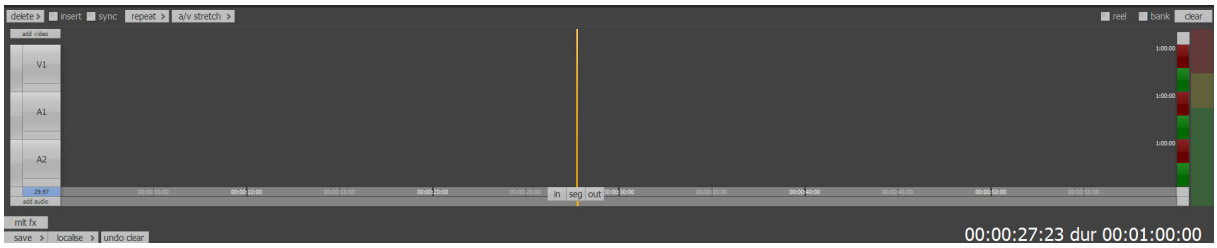


Clearing and Resetting the Timeline

When the Edit Application is opened, the edit from the previous session may appear if it wasn't cleared by the previous user.

The timeline can be cleared by clicking **clear** on the top-right of the timeline area, or by pressing <Alt>+<Return>.

To reset the timeline to the default settings, double-click on the **clear** box. Default timeline settings include horizontal/vertical scale, number of tracks, track names and the default frame rate (as set in the <F1> Configuration Window's **Editor** menu using the **Fps** scroll box).



A clear timeline consists of a default of 1 minute worth of blank frames.

copyright © Quantel Ltd 2001-2014

The Timeline

The timeline defaults to one video track and two audio tracks. The timeline can be used to assemble clips, create transitions and add features such as a voiceover.

The orange timeline cursor indicates the current frame on the timeline and can be used to move through the timeline and mark the in and out points of the current clip segment

The first clip placed on the timeline determines the video format, start timecode and audio track assignments for all the following clips assembled on the timeline. These can be changed as a later stage if required.

The Edit Window

The Edit Window is a visual representation of the timeline edit and displays the current clip frame, corresponding to the position of the orange timeline cursor. For accurate monitoring, it is advisable to regularly check the image output on an external video monitor. The Edit Window also contains basic editing controls. These are covered in detail in the next chapter.

See Chapter 2: “The Edit Window” for more information.

Understanding the Timeline

The Cursor

The timeline cursor provides a visual marker of the current frame on the edit. When the edit is played, the cursor's position updates accordingly.

Cursor Controls

The cursor's primary purpose is to provide an indication of the current frame in the edit (ie the frame shown in the Edit Window) but it also has a number of other functions that are described below:

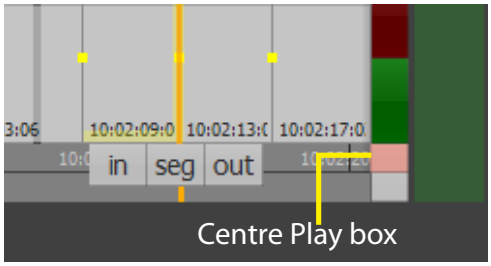
- The cursor can be used as a handle to scroll through the edit. Click and drag on the cursor to scroll to a new position.
- The cursor has selection tools attached to it. These tools can be used to select an in point (**in**) on the current frame, an out point (**out**) on the current frame or the whole of the current segment (**seg**).

See "Marking a Section" on page 4-2 for more information about these tools.

- When the cursor is placed at an edit point, trim tools are displayed which allow the current cut point to be adjusted.

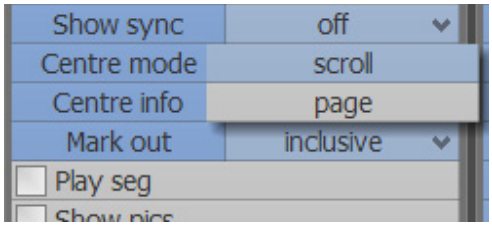
See "Trimming" on page 4-17 for more information about these tools.

Centre Play Mode



The small box below the Mute/Solo boxes is the Centre Play box. The Centre Play box fixes the timeline cursor in the centre of the screen so that when the edit on the timeline is played back the cursor stays in the middle of the interface and the timeline scrolls past it. When enabled, the Centre Play box highlights pink.

The **Centre info** box located in the **Editor** menu of the <F1> Configuration Window, allows to **max** (default) or **min**. This reduces the amount of information displayed on the timeline which is useful for some older graphics cards.



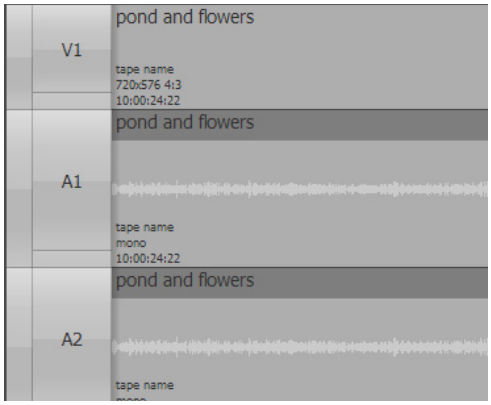
The **Centre mode** box can be set to either **scroll** (default) or **page**. With **scroll** selected the timeline cursor remains in the centre of the screen and the timeline scrolls past it. With **page** selected the timeline only updates when the cursor reaches the right-hand side of the timeline.

copyright © Quantel Ltd 2001-2014

Scaling Tracks

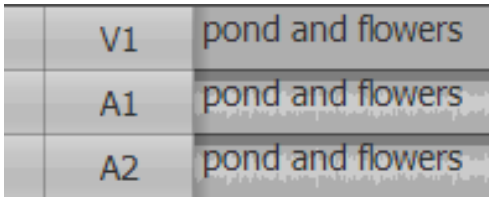
The video and audio tracks on the timeline can be scaled vertically allowing the size of each track to be customised to suit individual requirements.

Tracks Expanded:



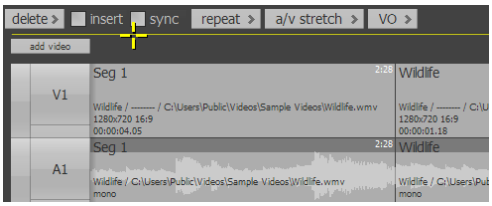
This screen shot shows all tracks expanded vertically. Expanding the vertical scale of the tracks is useful for viewing segment information, viewing audio waveforms and editing audio levels.

Tracks Reduced



This screen shot shows all tracks reduced vertically. Reducing the vertical scale of the tracks is useful when working with many tracks. Scaling them down reduces the amount of space the timeline occupies on the interface, providing a better view of the Edit Window and more free space on the desktop.

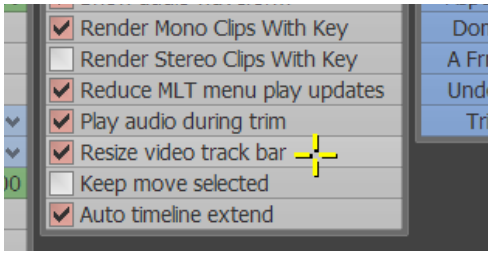
Using the Track Scale Line



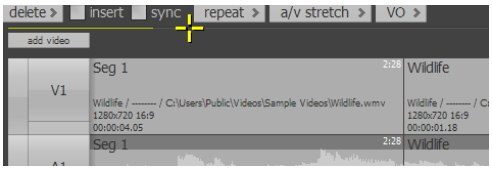
Above the timeline is the Track Scale bar. This can be used as a handle to vertically scale the timeline tracks. If the cursor is hovered over the bar it highlights yellow. This bar can be dragged up or down to expand or reduce the vertical sizing of all tracks evenly.

Right-click on the bar to distribute the vertical scaling of all tracks evenly. Note that the tracks are scaled down to the smallest scale when using this method.

Right-clicking again toggles the display to its previous state.

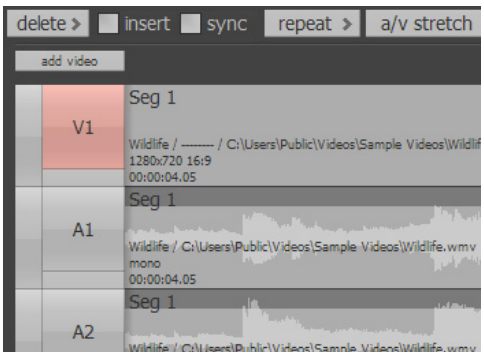


In the <F1> Configuration Window there is a **Resize video track bar** option under the **Editor** menu. When enabled the Track Scale bar spans the length of the timeline.



When this option is disabled the Track Scale bar is restricted to just the beginning and end of the timeline.

Using the Track Filter Boxes

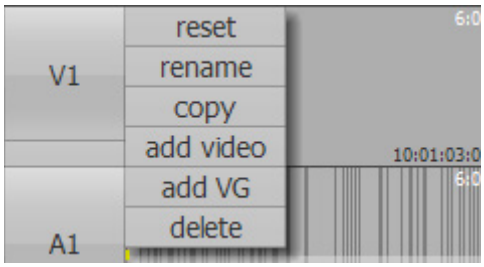


To the left of the timeline are the video and audio Track Filter boxes. As well as providing the ability to select and filter individual tracks they also can be used as handles to vertically scale the timeline tracks.

Each track can be scaled individually by clicking on a Track Filter box, eg **V1** (as shown in this screen shot) then dragging up or down to vertically expand or reduce the track. Scaling **A1** scales all audio tracks.

Reset to Default

To reset the vertical track scaling to its default, right-click on a Track Filter box, eg **V1**.



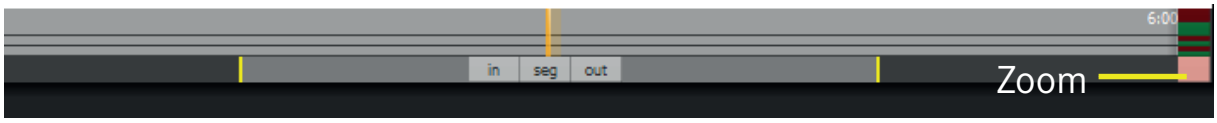
Select **reset** from the pop-up, that appears. The vertical display scale resets to its default setting.

Zooming in on the Timeline

As well as scaling the vertical display of the timeline, it is also possible to scale the horizontal scale of the timeline. This is useful for viewing individual segment information, viewing audio waveforms and performing accurate frame by frame editing.

When in zoom mode, the Scale Bar decreases in size to indicate that the timeline is zoomed in. When in zoom mode, the scale bar can be used to move backwards and forwards through the zoomed timeline. The length of the Scale Bar determines the number of visible frames arranged on the timeline.

When in zoom mode, the Zoom box to the right of the Scale Bar turns pink.



The following section provides information on how to zoom in on the timeline display. The actual video image (as seen in the Edit Window) can be zoomed whilst in either the Quick Fix (<F8>) menu, Effects Application or the MLT FX Menu.

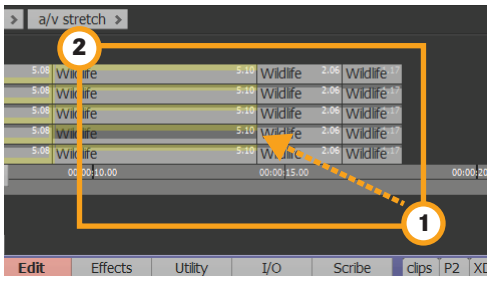
copyright © Quantel Ltd 2001-2014

Zoom In

To zoom in on the timeline, do one of the following:

- Place the cursor on the dark grey Scale Bar directly below the timeline and drag upwards.

- Click once on the timeline Scale Bar. This method zooms in to the current segment.
- Draw a lasso over the timeline:



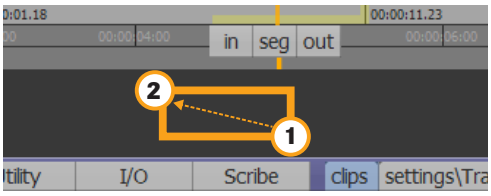
Start in the blank area below the timeline and drag the lasso from bottom-right to top-left. To return to default scale view, draw a small lasso in the same way, but in the grey empty area under the timeline.

- Hit the <Page Up> key.

Zoom Out

To zoom out, do one of the following:

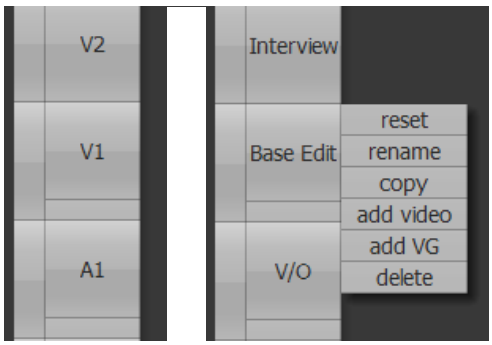
- Place the cursor on the dark grey Scale Bar directly below the timeline and drag downwards.
- Click the Zoom box to return to the default scale. This box can also be used to toggle between the default and the zoom level previously set.
- Draw a small lasso similar to the one shown above.



This lasso needs to start and finish in the grey empty area beneath the timeline.

- Hit the <Page Down> key. This method zooms out in graduations.

Video and Audio Track Naming

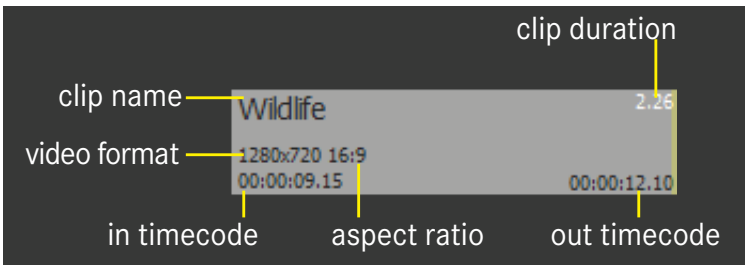


Video and audio tracks can be renamed by right-clicking on the Track Filter box and clicking **rename**

To return to the default name (**V1**, **A1**) click **rename** again and clear the new entry.

If the 'clear' box is used to clear the timeline or if the session is ended by closing the software, the track names are reset to the default.

Timeline Clip Segment Information



When the vertical scale of a video or audio track is expanded sufficiently, each segment displays specific information about the segment's origin.

Audio segments also display audio content (ie mono, stereo, quad etc as defined when recorded).

The original file name and path can be displayed as part of the segment information for any file based material by ticking the 'File name' box in the 'Clips' menu of the <F1> Configuration Window.

Enabling Segment Thumbnails

A thumbnail image of the first frame of each segment can be displayed as part of the segment information. To do this, open the <F1> Configuration Window and select **Show Pics** from the **Editor** menu.

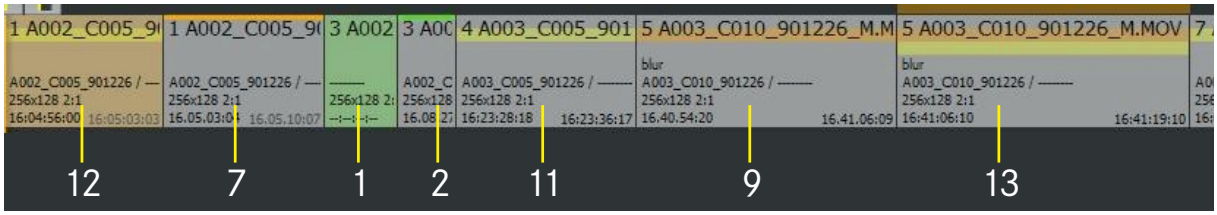
Expand the vertical scale of the segment (by zooming in on the timeline) in order to display the full segment information as well as the thumbnail image.

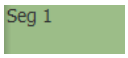
copyright © Quantel Ltd 2001-2014

Colours and Highlights

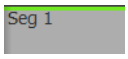
Segments on the timeline display a coloured bar or highlight to indicate useful information. This can be where the segment originated from or any associated history, eg any effects applied in the Effects Application or the MLT FX menu. Note that when rendering is required, an orange bar appears in the dark grey area ABOVE the clip segment.

Here are some examples of different coloured segments on the timeline. The numbers correspond with the list below.

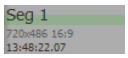




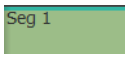
1. Segment with unrendered multiple layer **Effects** history.



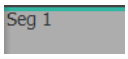
2. Segment with rendered multiple layer **Effects** history.



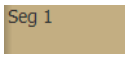
3. Multi-layer (MLT) server-held segment that is subsequently viewed on non-MLT seat (eg sQ Cut).



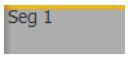
4. Unrendered Effects Template has been applied.



5. Rendered Effects Template has been applied.

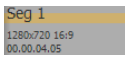


6. Segment with unrendered single layer Effects history.



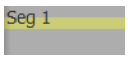
7. Segment with rendered single layer Effects history.

8. Unrendered segment with MLT FX history.

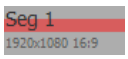


9. Rendered segment with MLT FX history.

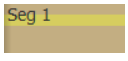
10. Segment containing an input key created using the DVE or key tools.



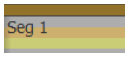
11. Soft-mounted/remotely held media segment. On sQ Server systems the soft-mount indication can be disabled via the **Remote Media Indicator** box in the <F1> Configuration Window's **Clips** menu.



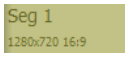
12. Soft-mounted segment that has become disconnected or 'offline'.



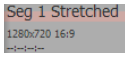
13. Soft-mounted segment with unrendered single layer Effects history.



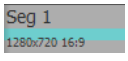
14. Unrendered soft-mounted segment with MLT FX history.



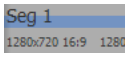
15. Unrendered segment being edited using the <F8> or 'Quick Fix' menu.



16. Segment that has been stretched then rendered using **a/v stretch**.

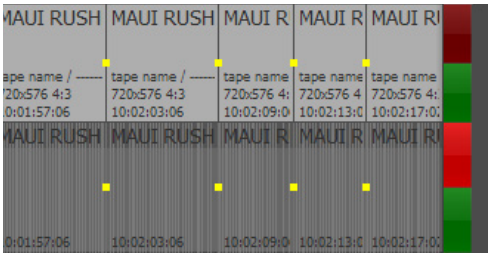


17. Rendered/unrendered segment that is part of an MLT FX group.



18. Stereo3D segment.

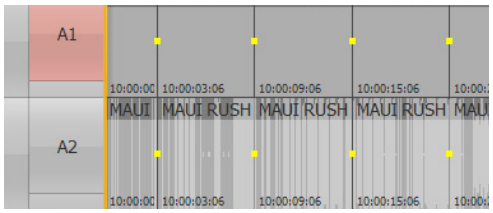
Muting and Soloing Tracks



The Mute and Solo boxes are located to the right of each timeline track. The Mute boxes (red) are used to mute specific tracks so that they are not included in the overall output. The Solo boxes (green) specify a single track to be monitored. The Mute and Solo boxes do not affect the video or audio if the clip is saved or published.

Multiple tracks can be muted at any one time. Only one track can be soloed at any one time.

Enabling and Disabling Track Boxes



Click on the Track Filter boxes (**A1**, **A2** etc) to enable or disable tracks. Only enabled tracks (highlighted pink) are affected when any subsequent adjustments are made to the timeline or any processes are applied. Any disabled tracks remain unaffected.

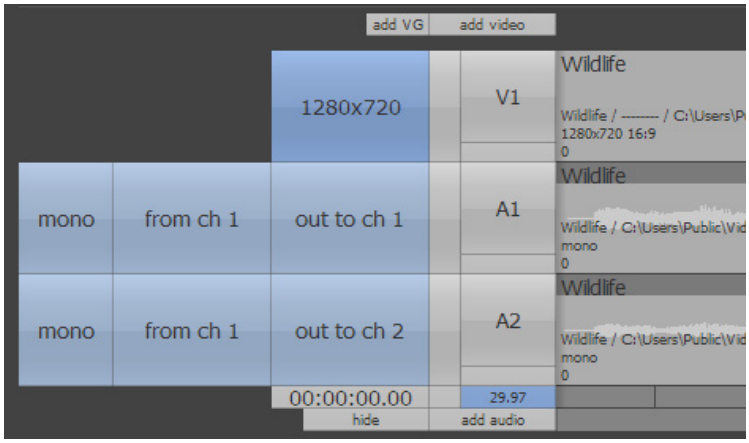
This is useful when performing video-only or audio-only editing. The Track Filter boxes do not affect the video or audio if the clip is saved or published.

If none of the tracks have been selected, any process that is applied affects all the tracks.

Revealing 'Hidden' Menus

There are two hidden menus available on the timeline that contain audio level controls, channel assignment controls and additional editing tools. Access the hidden menus by doing the following:

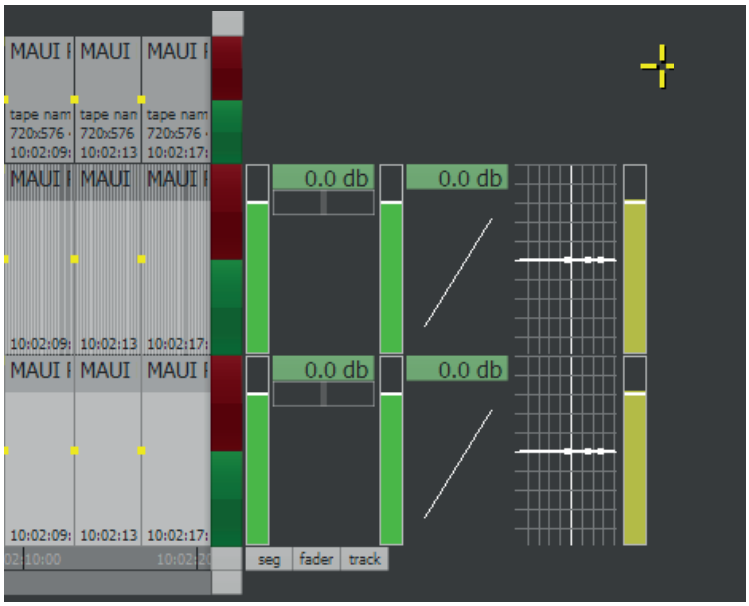
Reveal Left Hidden Menu



1. Click on any Track Filter box to the left of the timeline (eg **V1**, **A1** etc).
2. Drag to the right to reveal audio input/output controls.
3. Click on any Track Filter box and drag to the left to hide the menu again.

copyright © Quantel Ltd 2001-2014

Reveal Right Hidden Menu



1. Click on any of the red/green Mute/Solo boxes to the right of the timeline.
2. Drag to the left to reveal audio editing tools.
3. Click on the Mute/Solo boxes and drag to the right to hide the menu again.

See the 'Audio Editing User Guide' for more details about audio tools and editing.

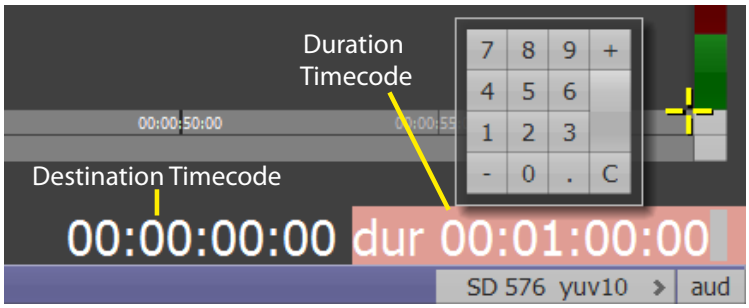
Set Global Parameters

Before starting an editing, the following timeline parameters can be set up if required:

- Edit length.
- Frame rate.
- Destination (start) timecode.
- Display format (video monitor).
- Video format (resolution, aspect ratio, bit depth, colour space etc).

Set Total Edit Length (Dur)

The timecode display is located below the bottom-right of the timeline.



To set the total edit length click the duration timecode (see screenshot) and enter the desired length of the edit that is to be assembled on the timeline. Hit the <Enter> key to set.

After editing, if there is any empty space remaining at the end of the edit, it can be removed by clicking the duration timecode then entering 0. Hit the <Enter> key to set.

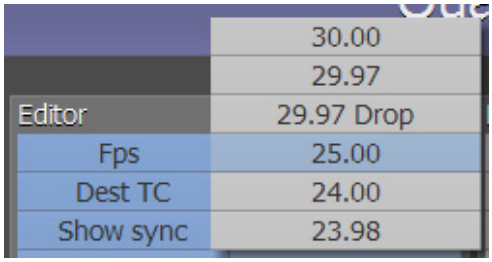
The timeline auto extends if 'Auto timeline extend' is selected from the Editor menu in the <F1> Configuration Window

Clicking 'dur' itself (not the timecode) toggles between frame/timecode display.

Set Frame Rate

Before assembling material on the timeline, the timeline frame rate needs to be set to suit the frame rate of the material being used. This affects how clips are played-back locally and ensures optimum image quality. To set the frame rate, do the following:

1 Hit the <F1> key to display the Configuration Window.



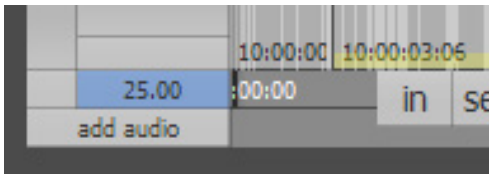
2 Click the **Fps** scroll box in the **Editor** menu.

3 Scroll to the appropriate option.

4 Hit the <F1> key again to exit the Configuration Window.

copyright © Quantel Ltd 2001-2014

Frame rate options with '**...Drop**' in the title are used to select whether drop frame or non drop frame timecode operation is used during editing.

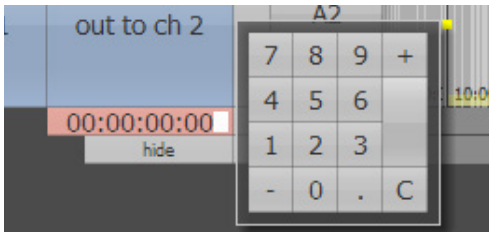


The selected frame rate appears in the blue box on the bottom-left of the timeline (see screenshot).

If a clip with a different frame rate is placed on the timeline, the FPS box turns orange as a warning.

Set Destination (Start) Timecode

The destination timecode specifies the start timecode for the edit on the timeline.



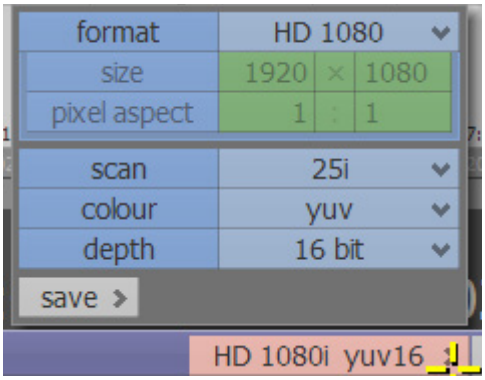
To set the destination timecode access the hidden menu to the left of the video track (see page 1-18).

Click on the timecode box (above the **hide** button) and enter the required destination timecode. Hit the <Enter> key to set.

A default timecode can be set in the <F1> Configuration Window by navigating to the **Editor** menu and entering a value for **Dest TC**. All default timelines start from this timecode.

Set Display Format

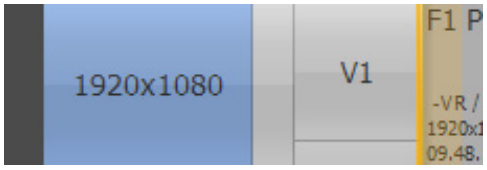
This specifies how material is previewed if an output monitor is being used. To set the display format, do the following:



1. Click the Display Format box located at the far right of the Application Bar. This highlights pink as seen in the screenshot.
2. A pop-up appears allowing output **format**, **size**, **pixel aspect**, **scan, colour** and **depth** to be set.
3. Click **save** to store the settings as a preset that appears in the **format** scroll box.
4. When the required settings have been selected, click on the Display Format box to close the pop-up.

Set Video Format

The first clip placed on the timeline determines the video format for the whole edit and must therefore match the required output aspect ratio. Consider this setting carefully before inserting the first clip.



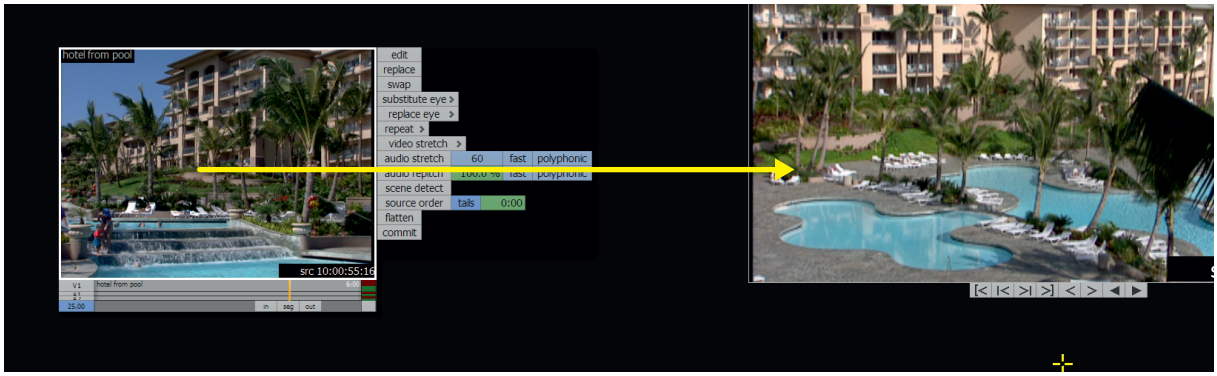
When the first clip is inserted its format can be seen by accessing the hidden menu to the left of the video track (see page 1-18).

Placing Clips on the Timeline

Media can be placed on the timeline in a number of ways depending on user preference and workflow.

To load a clip, do one of the following:

Using the Edit Window



Clips can be dragged directly from a bin or from the desktop and dropped onto the Edit Window to load the clip on the timeline at the current cursor position. Hover the clip over the Edit Window before letting go to see a preview on the timeline of where the clip will be placed.

If an edit already exists on the timeline the new clip overwrites any existing frames that are overlapped. Most editors prefer to use this method.

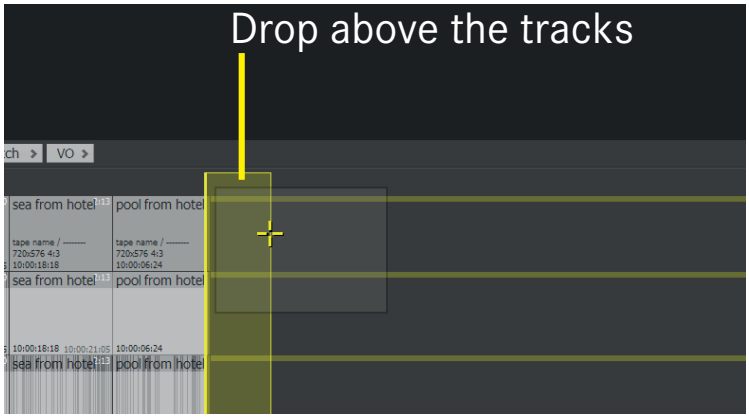
Inserting Multiple Clips

Multiple clips can be dropped onto the Edit Window by hitting the <Ctrl> or <Shift> keys to select the required clips, or by drawing a lasso around them, and then dragging and dropping the selection onto the Edit Window.

Using the Timeline Tracks

Clips can be dragged and dropped directly onto the timeline. A yellow highlight indicates where the clip will be placed and which tracks it will occupy. If an edit already exists on the timeline, the new clip overwrites any frames that it overlaps.

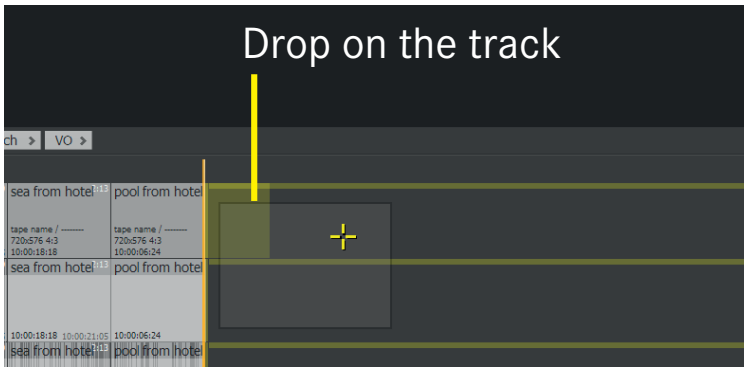
To Insert ALL Video and Audio Tracks



Dragging a clip and hovering in the dark grey area directly above the video track ensures all video and audio tracks are transferred to the timeline. Drop the clip in this dark grey area to ensure all tracks of the clip are inserted.

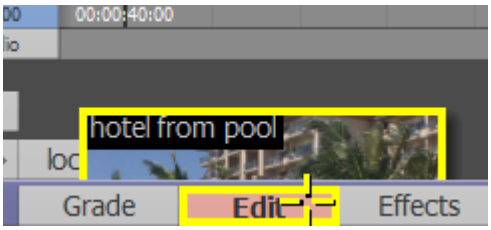
copyright © Quantel Ltd 2001-2014

To Insert ONE Video or Audio Track



Hold the clip directly on top of the destination video or audio track to add the corresponding video or audio track. Only this track is highlighted and only the corresponding video/ audio track is placed onto the timeline when it is dropped.

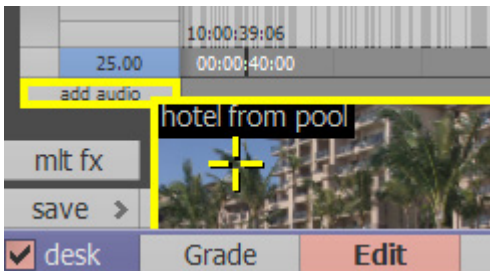
Using the 'Edit' Tab



Dragging a clip onto the **Edit** tab (which highlights yellow) on the Application Bar loads the clip on the timeline, overwriting any existing timeline clips. Note that the Edit application does not need to be open to do this.

Using the Add Audio/Add Video Buttons (Add Tracks)

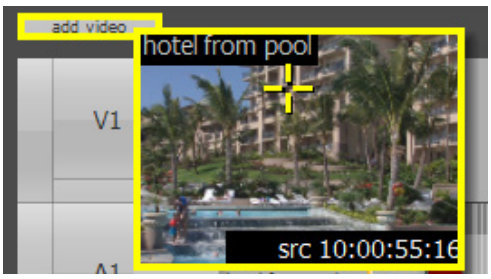
Clicking the **add audio** box anytime adds a new blank audio track.



Alternatively, clips can be dragged directly onto the **add audio** box (which highlights yellow) to create a new audio track and loads the clip's audio at the current cursor position.

Dragging a clip directly onto the 'add audio' box only adds the highest audio track (A1). Any video or subsequent audio tracks are not added when using this method.

See the 'Audio Editing User Guide' for more details about audio editing.

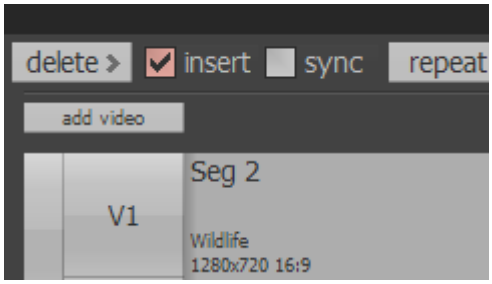


The **add video** box allows additional blank video tracks to be added to the timeline.

Clips can be dragged directly onto the **add video** box (which highlights yellow) to create a new video track and load the video clip at the current cursor position.

Dragging a clip directly onto the 'add video' box only adds the contents of V1. Any audio or additional video tracks are not added when using this method.

Performing an Insert Edit

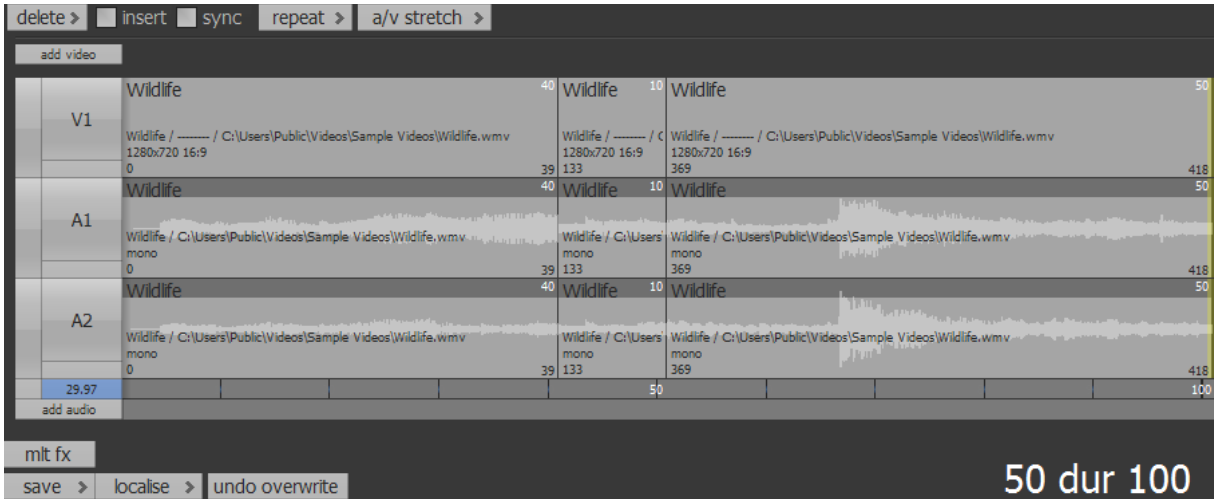


The **insert** tick box at the top-left of the timeline can be used to prevent a new clip overwriting any existing frames on the timeline. When new media is placed onto the timeline with the **insert** box selected, the existing clip is split and the new media is inserted in the middle. This is referred to as an 'insert edit'.

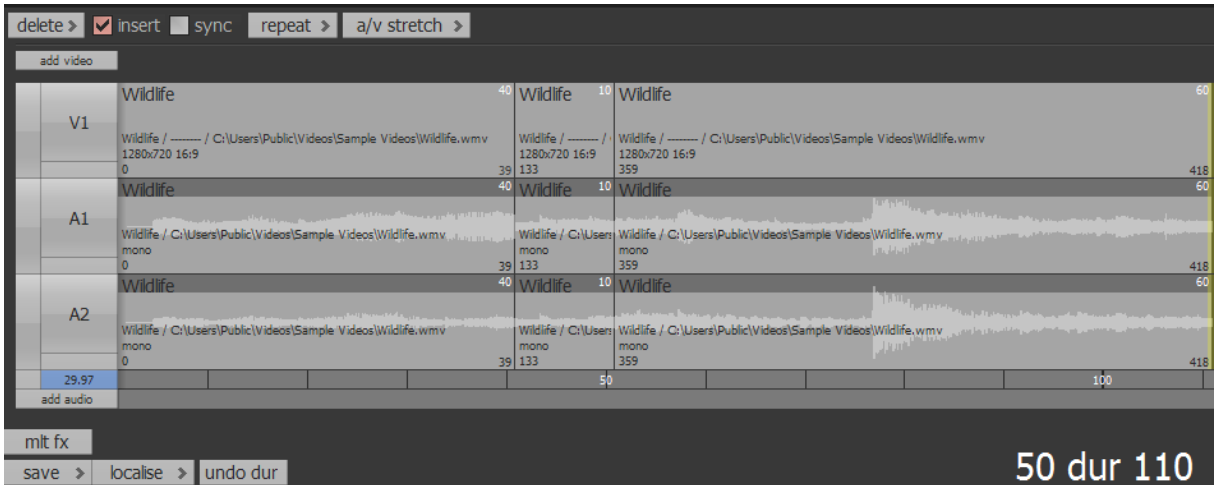
For example, there is a 100 frame segment on the timeline and a 10 frame segment is dropped into the middle of this Without **insert** selected the resulting clip would remain at 100 frames long with the new 10 frame segment overwriting 10 frames of the original segment.

With **insert** selected, the resulting clip would be 110 frames long as all of the original frames are retained and the 10 new frames are inserted at the current cursor point.

Without **insert** selected:

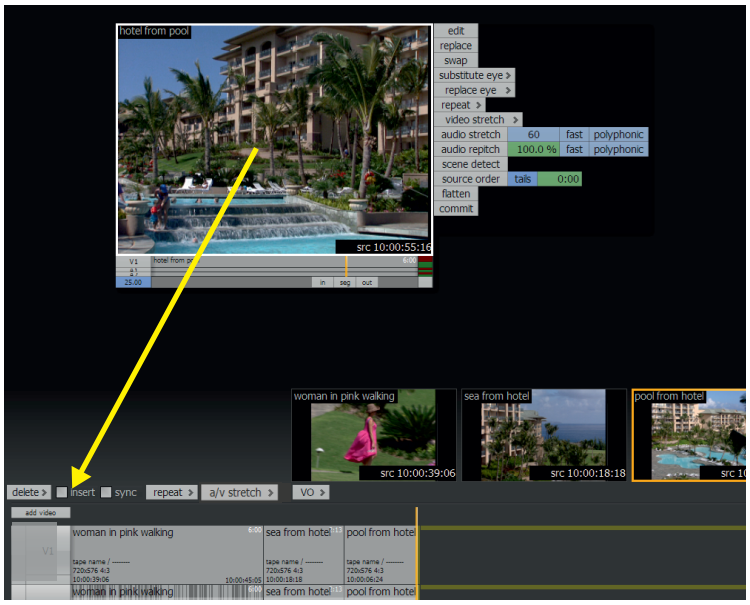


With **insert** selected



copyright © Quantel Ltd 2001-2014

To place a clip on the timeline using **insert**, do the following:



1. Select the **insert** tick box or hit <Insert> on the keyboard to toggle the tickbox.
2. Move the cursor to the required timeline position.
3. Select the Floating Clip or segment to be inserted.
4. Drag and drop the clip over the Edit Window or hit <Return> on the keyboard. Alternatively, drag and drop the clip directly over the insert box (which highlights yellow).

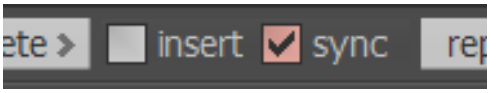
The new clip is inserted at the cursor position, splitting the existing segment and moving it along the timeline accordingly.

Note that if in and out points have been set on the Floating Clip, only the marked segment is inserted. If the in and out points have not been set the whole clip segment is inserted.

With the focus on a Floating Clip, hitting <Ctrl> + <Return> performs an 'insert edit' regardless of whether the 'insert' button is enabled or disabled.

Using 'insert' can take clips out of sync on the timeline. Using sync locks can prevent this. See "Video/Audio Sync" on page 4-22 for more information.

Synchronising Cursor Positions ('Sync')



With the **sync** box selected, a clip can be placed onto the timeline with its cursor point matching the cursor point on the timeline.

This is often useful when synchronising audio to video. For example, video of a car race can be loaded onto the timeline. An independent clip with audio of a fast car can then be synced to the video. To use the sync feature, do the following:

1. Select the **sync** tick box.
2. Place the cursor at the required point on both the timeline clip and the Floating Clip at the frame where the two clips need to match, eg as the car races past the camera and appears at its loudest. Ensure the correct Track Filters are selected.
3. Hit <Enter>.

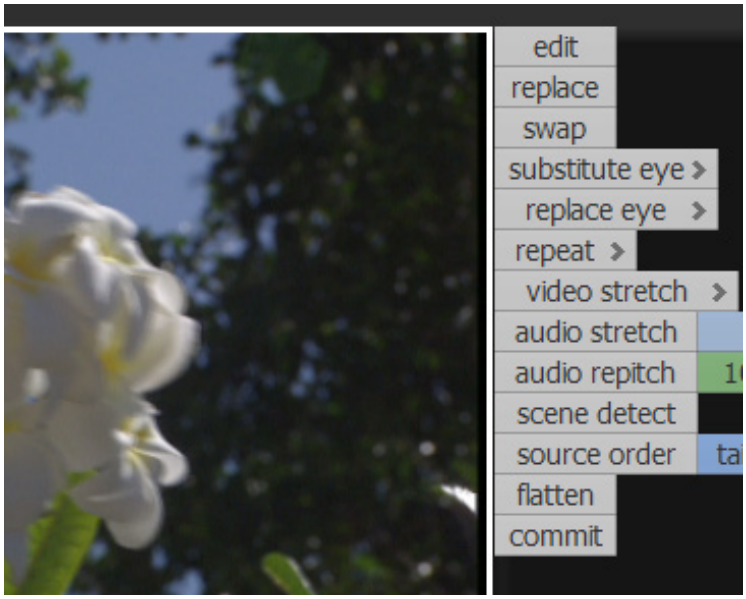
The audio of the Floating Clip is inserted at the marked point of the timeline video clip. The timeline is filled accordingly between the marked points, either side of the cursor position.

Use the Reel

To display the Reel above the timeline select the **reel** tick box located to the top-right of the timeline area. Dropping a clip into any position on the Reel display inserts the clip (or selected section of a Floating Clip) at the corresponding timeline position.

See "Reel (Storyboard)" on page 3-9 for more information.

Using the Floating Clip 'More' Menu



Selecting **edit** from the hidden **more** menu found at the top-right of a Floating Clip places the clip (or a selected section of the Floating Clip) at the current timeline cursor position or within marked in/out points on the timeline. The new clip overwrites any media that it overlaps.

The **replace** option places the clip on the timeline and replaces any existing edit on the timeline.

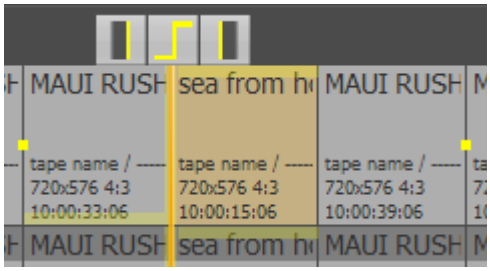
The **swap** option places the content of the Floating Clip onto the timeline and simultaneously places the timeline contents onto the desktop as a floating clip, ie the Floating Clip and the timeline edit are 'swapped'.

See the Desktop Editing User Guide for more information about the 'more' menu and working with Floating Clips.

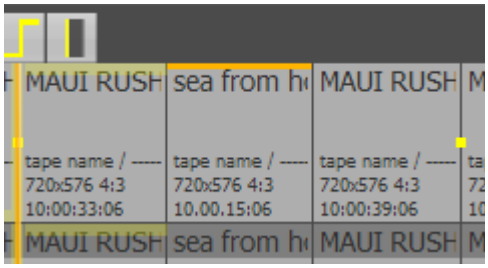
copyright © Quantel Ltd 2001-2014

Moving Clips between Edit and Effects

If the **Effects** tab on the Application Bar is blue, an existing clip is present on the **Effects** timeline. Press <Ctrl> together with the **Effects** tab to replace the existing clip with the current timeline clip. Clips can also be dropped directly onto the Effects Application tab.



If the clip is unrendered before returning to the **Edit** timeline, the clip segment is highlighted orange. If playback of the clip is attempted, a still (the first rendered frame of the clip) appears in the Edit Window with a yellow and black chequerboard symbol in the top-left corner indicating that an effect has been added and that a render is required.



If the clip is rendered before returning to the **Edit** timeline**,** the clip segment is highlighted with an orange line indicating that an effect has been added and rendered and that the clip is playable.

If the clip has multiple Effects layers the highlight line is green.

Multi-layer timelines cannot be taken into Effects. The MLT FX suite is used for MLT edits.

See the Effects Application Reference for more information about the Effects Application.

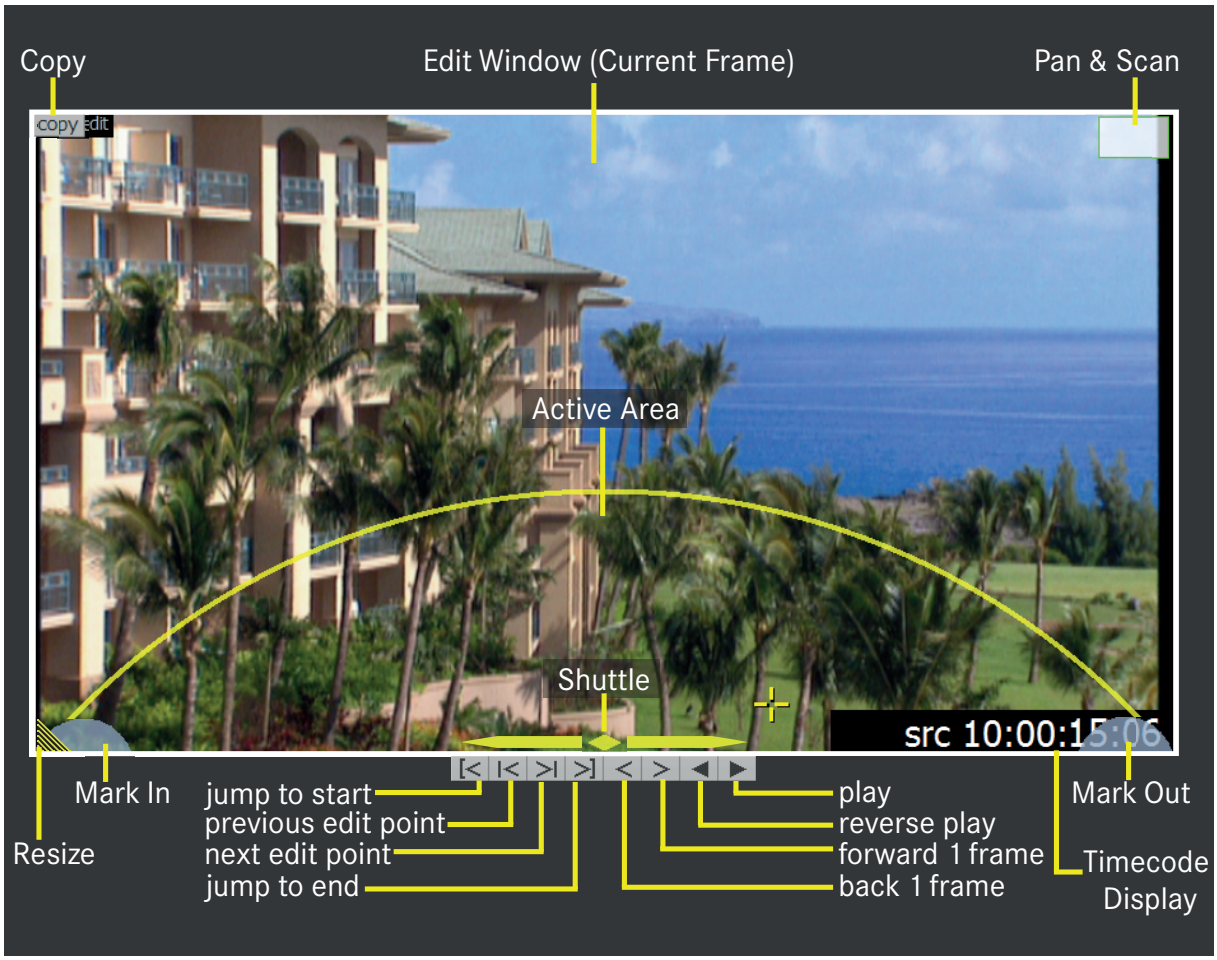
copyright © Quantel Ltd 2001-2014

The Edit Window

Edit Window Functions

The Edit Window in the top-right of the GUI is a visual representation of the timeline edit. It displays the current clip frame, corresponding to the position of the orange timeline cursor.

As the Edit Window provides a representation only, it is advisable to regularly check the accurate image output on an output display monitor.



The Active Area

If the cursor is hovered over the bottom half of the Edit Window a yellow arc appears across the image. This is the Active Area and it contains tools for navigating and editing the current timeline clip.

copyright © Quantel Ltd 2001-2014

Clip Navigation

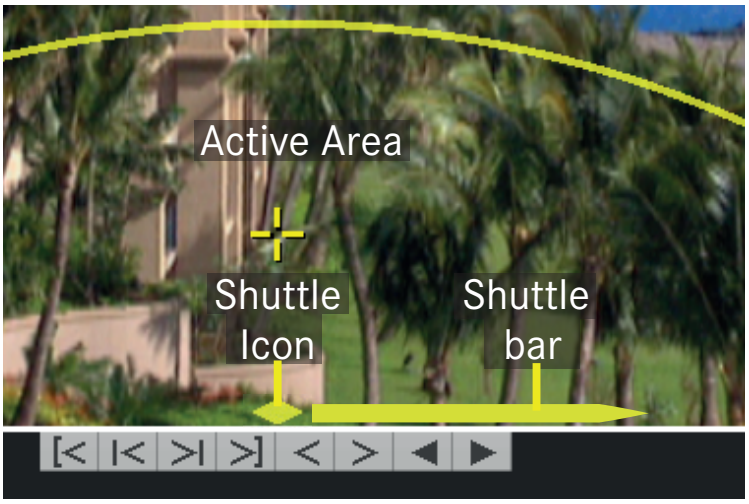
The following tools can be found in the Active Area and are used for clip navigation.

Jog

'Jog' refers to a slow movement through the clip, ie frame-by-frame. To jog through the clip, click and hold anywhere in the Active Area and drag to the left or right. This moves the clip frame by frame backwards or forwards. When using the jog function a thin yellow striped bar extends along the bottom of the Active Area.

For more accurate control of jog, click and hold in the Active Area and draw circles clockwise to jog forward or anti-clockwise to jog backwards.

Shuttle



'Shuttle' refers to a fast movement through the clip. To shuttle through the clip, position the cursor in the lower-centre of the Active Area until a yellow diamond symbol appears. This is the Shuttle icon. Click on the icon and drag left or right to shuttle backwards or forwards through the edit.

When using the shuttle function a thick yellow bar extends backwards or forwards along the bottom of the Active Area. The more extended the yellow bar becomes the faster the shuttle movement is.

Play/Pause

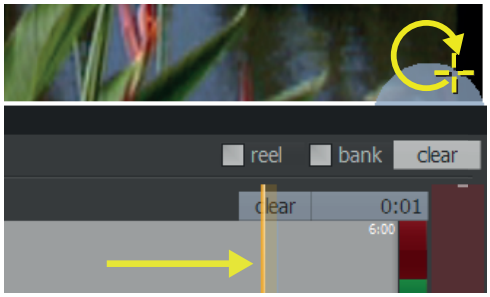
Click anywhere in the Active Area to play or pause the clip.

Marking a Section

In and Out Points

A section of the timeline clip can be selected by marking 'in' and 'out' points on it. Using the Edit Window, in and out points can be marked in the following ways:

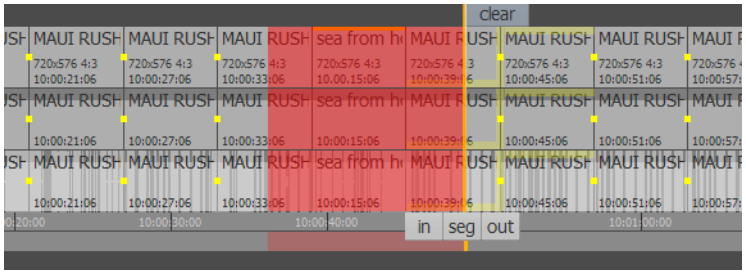
- Hover in the bottom left of the Edit Window to reveal the blue half circle (see screen shot). This is the 'mark in' icon. Click this to mark an in point at the current cursor position. Hover in the bottom right of the Edit Window to another blue half circle. This is the 'mark out' icon. Click this to set the out point.



- Click and hold the 'mark in/out' icon and move the cursor clockwise/anti-clockwise to move the in/out point. For example, in the screenshot, the cursor is moved clockwise on the 'mark out' icon. This moves the out point to a later point on the clip.

See "Marking a Section" on page 4-2 for information on marking a section using the timeline controls and more information about the Lift menu and it's functions.

The in and out points are displayed in the Edit Window as vertical blue markers along the left (in point) and right (out point) edges of the image.

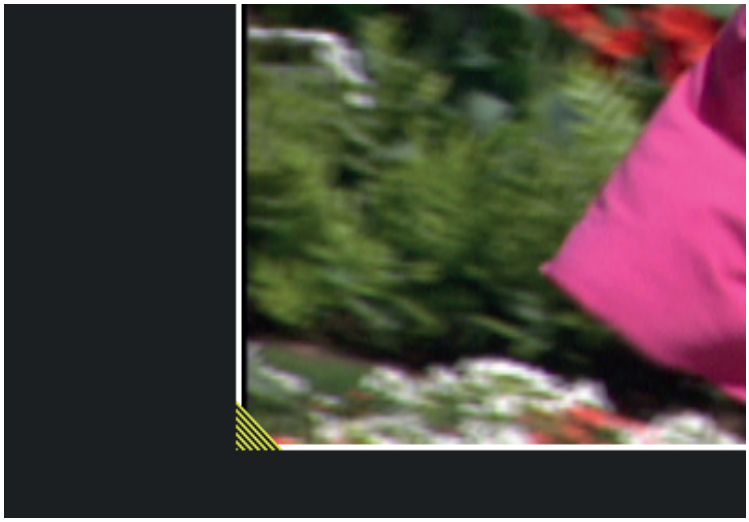


A red track highlight indicates invalid marks. For example, if the out point has been placed before the in point.

Selecting specific track boxes (eg 'V1', 'A1' etc) isolates the selection to that particular track.

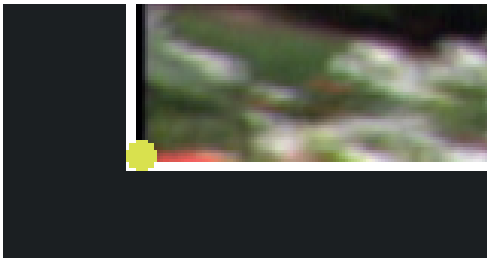
copyright © Quantel Ltd 2001-2014

Resizing the Edit Window



To resize the Edit Window hover in the bottom-left corner. A resize icon appears. Click and drag on the icon until the window is the required size.

If the resize icon is clicked once, the Edit Window is automatically resized and repositioned to the system default. Click again and it returns to the most recent resize.



Hold down <Ctrl> and click on the resize icon to lock the current size of the window (indicated by a yellow dot over the resize icon). To unlock, click on the dot.

Create a Copy

The **copy** tool is revealed by hovering over the top-left corner of the Edit Window. Click the **copy** box to create a copy of the timeline clip in the form of a Floating Clip.

Timecode Display

A clip's timecode can be displayed in the bottom-right of the Edit Window.

To display the timecode, hover in the bottom right area of the Edit Window until the following icon: ◁ appears. Click the icon to reveal the Source Timecode for the current frame of the timeline clip.

To toggle through the different timecode displays available, click in the area directly above the display. When the cursor is hovered above the timecode a preview of the next available timecode is displayed.

The following timecode displays are available:

Click the icon to reveal the Source Timecode for the current frame of the timeline clip.

Click this icon to reveal the Source Timecode.

Source Timecode

Destination Timecode

Time of Day Timecode

Holding down the <Shift> key and clicking on the timecode display allows two different timecodes (for example Source and Destination) to be displayed simultaneously.

Other choices (such as Keycode) can be specified using the **Clips** menu in the <F1> Configuration Window.

copyright © Quantel Ltd 2001-2014

Safe Area Display

The Safe Area display ensures that the most important parts of the image are displayed on the output. Hit the <F3> key to show or hide the safe area display within the Edit Window. To change parameters for the safe area, access the Safe Area menu by hitting <Ctrl> + <F3> .

Pan & Scan

Pan & Scan allows the image to be resized and repositioned along the timeline. When the edit is played on the timeline the Pan & Scan occurs in real time.

To access the Pan & Scan menu hover the cursor over the top-right of the Edit Window and click the grey box that appears.

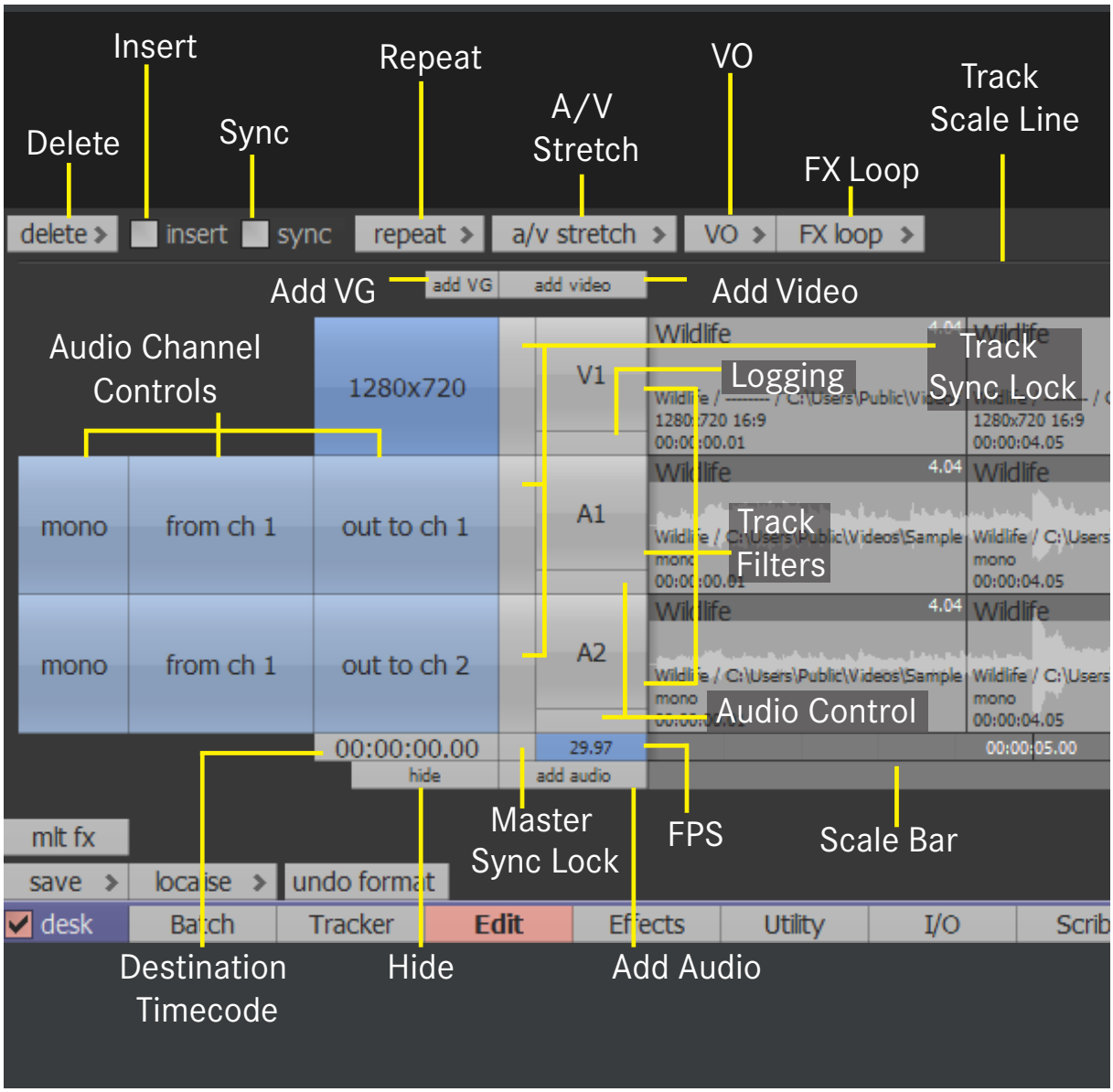
Note that Pan & Scan is not available on all platforms.

See “Pan & Scan” on page 3-42 for more details about this function.

copyright © Quantel Ltd 2001-2014

The Timeline

Timeline Features

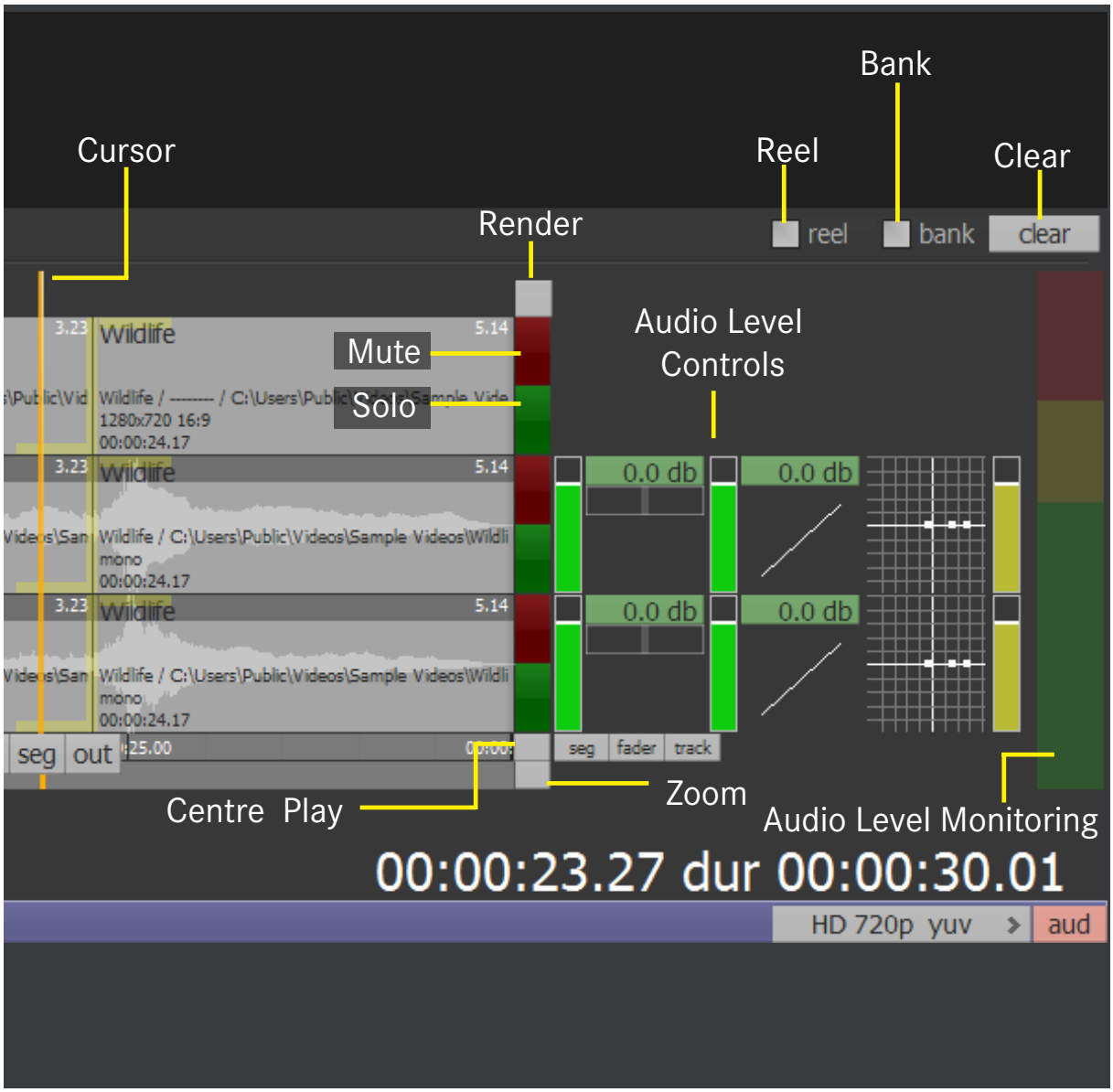


The Edit Application timeline consists of one video track and two audio tracks by default. Depending on the Quantel product being used, up to 16 audio tracks can be available on the timeline and multiple video tracks can be added. Tracks can also be deleted, although a minimum of one video track remains at all times.

A range of player formats are available: SD, HD, 2K, Quad, 4K etc. If a clip is played-out at a different frame rate, the system has the ability to change the audio pitch as well as add a 2/3 field or frame pull-down.

The timeline editor is multi-resolution and supports a wide range of image aspects, pixel shapes, bit depths, colour space and sampling structure. Multiple resolutions and aspects can be combined on one timeline. Stereo, mono clips and clips with a key can all coexist in one edit sequence. Mono, Stereo and Quad audio is also supported.

copyright © Quantel Ltd 2001-2014



The timeline can be used to assemble clips, create transitions between clips and provide a method of navigating through the whole edit.

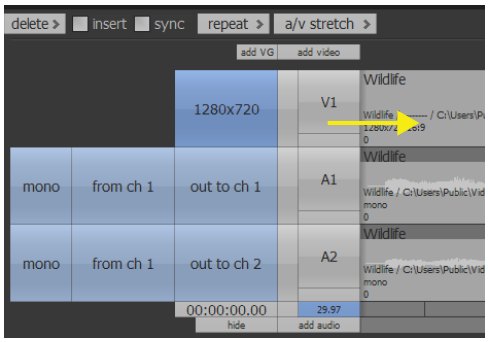
There are two 'hidden' menus contained within the timeline that provide additional tools including audio channel controls and audio level controls.

The timeline cursor indicates the current frame on the timeline and can be used to navigate through the timeline and set 'in' and 'out' points to select a section of the of clip.

The first clip placed on the timeline determines the initial video format, start timecode and audio track assignments for all the following clips assembled on the timeline. Therefore, the first track needs to include the settings that are required for the whole edit.

Hidden Menus

There are two hidden menus available on the timeline that allow audio levels to be controlled and channels settings to be assigned, as well as providing some additional video tools.



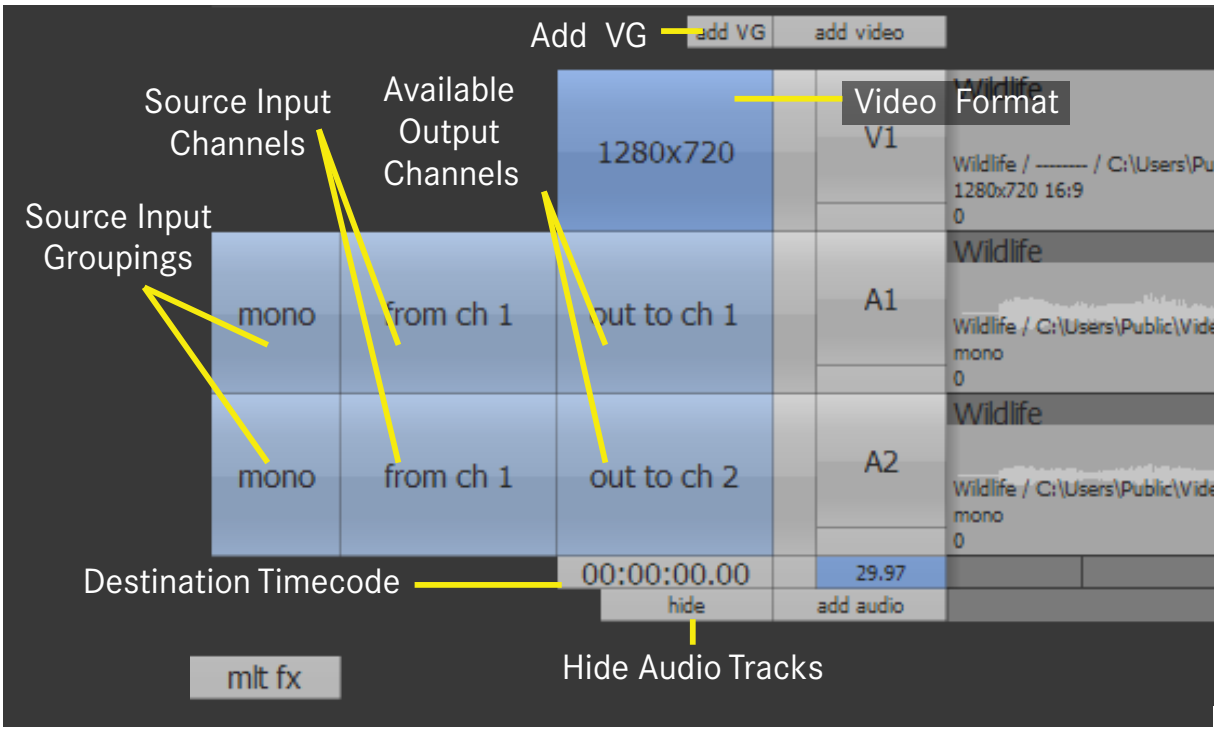
Access Left Hidden Menu

The hidden menus can be accessed by doing the following:

1. Click on any track filter box (eg **V1**, **A1** etc).
2. Drag to the right to reveal the hidden menu.
3. Click and hold on any track filter box and drag to the left to hide the menu again.

Left Hidden Menu Tools

The following tools can be found inside the left hidden menu:



Video Guide

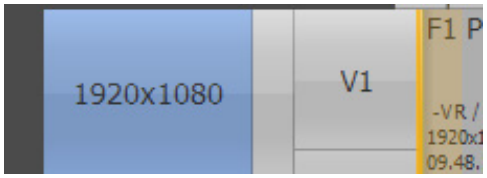
The **Add VG** box allows a 'video guide' track to be added above the existing video track(s). A reference clip (eg an offline edit created at an earlier stage usually at lower resolution) can be added to the video guide track and can be used for shot matching between the edit on the timeline and the reference clip.

See "Using Reference Clips" on page 3-20 for more information.

copyright © Quantel Ltd 2001-2014

Video format

The Video Format box provides information about the size of the video on the timeline. It is dark blue indicating that it is information only and can not be modified.



The first clip placed on the timeline determines the video format for the whole edit and must therefore match the required output format. Consider this setting carefully before inserting the first clip.

Audio Grouping

The Source Input Groupings scroll box displays the source grouping of the clip, eg **mono**, **stereo**, **quad** etc. This can be changed (where available) by scrolling to a new grouping.

Audio Source Channels

The Source Input Channels scroll box allows the source channels to be specified or changed.

Audio Output Channels

The Output Channels scroll box allows output channels to be specified.

See the 'Audio Editing User Guide' for more details about audio editing and processing.

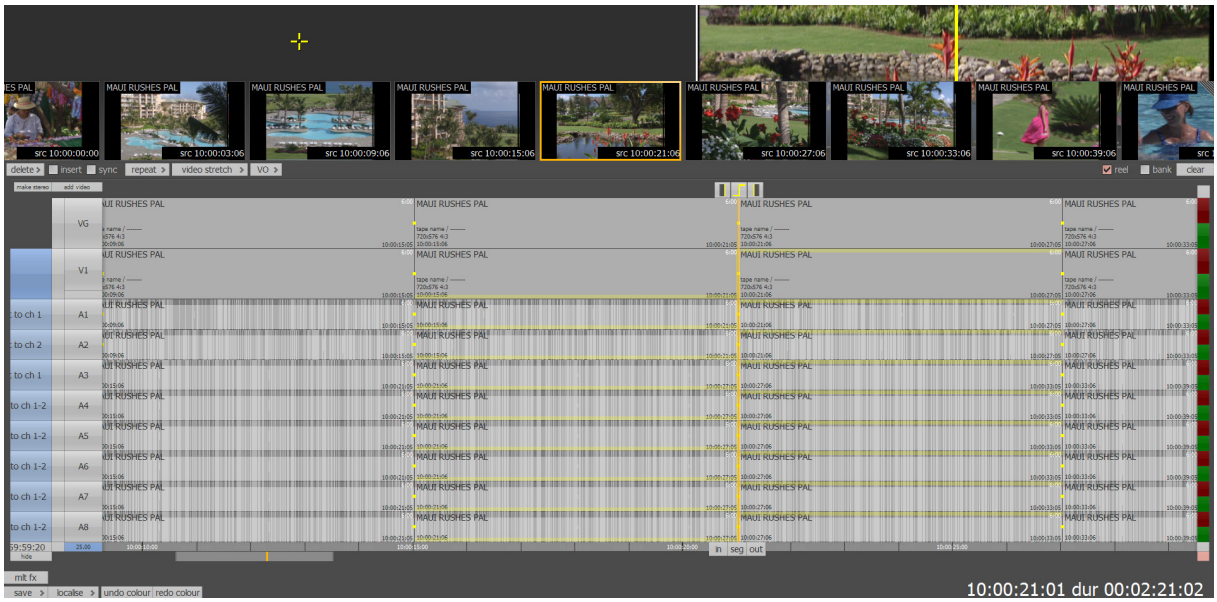
Destination Timecode

The destination timecode specifies the 'start' timecode of the timeline. The default is set in the <F1> Configuration Window under the **Editor** menu.

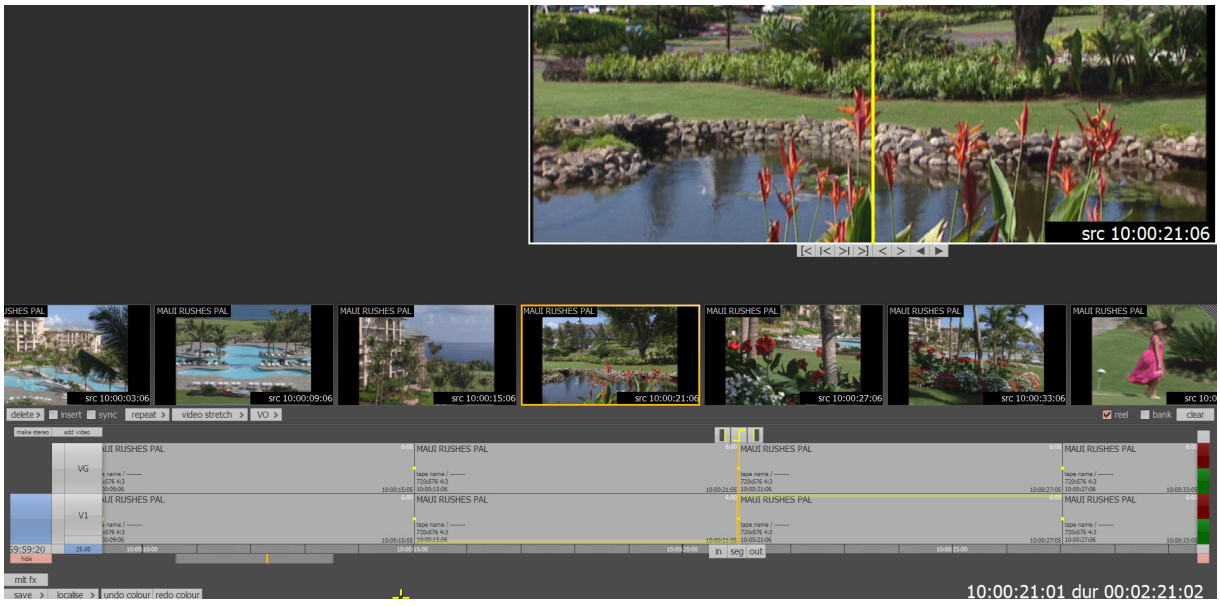
Hide

The **hide** box located below the left side of the timeline allows audio tracks, audio tools and audio controls to be temporarily 'hidden'. Hiding the audio tracks can be a useful way to temporarily create more space on the interface in order to focus on video editing.

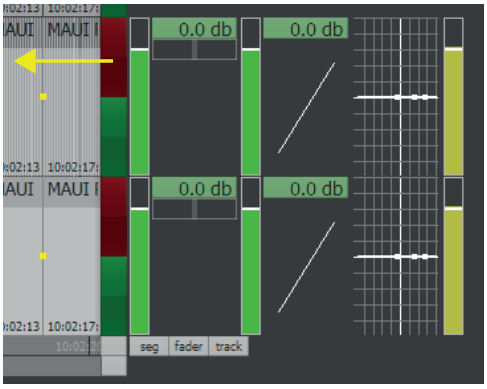
For example, this screenshot shows a typical interface with multiple audio tracks, a single video track, a video guide track and the Reel displayed. Without the **hide** box enabled the interface may become crowded.



With **hide** selected, the audio tracks are temporarily hidden from the interface, creating more free workspace (see screenshot).



copyright © Quantel Ltd 2001-2014

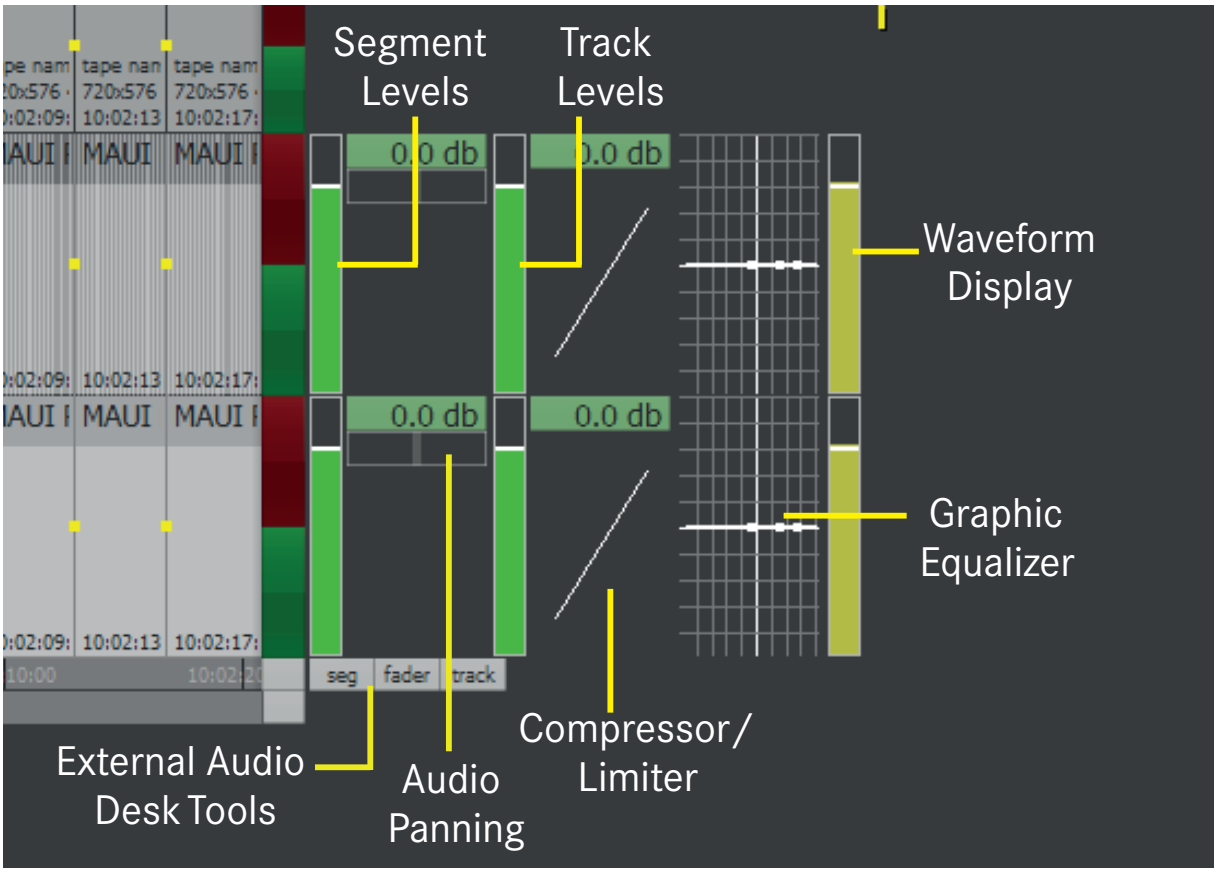


Access Right Hidden Menu

1. Click and hold on any of the red/green Mute/Solo buttons to the right of the timeline.
2. Drag to the left to reveal a selection of audio tools.
3. Click and hold on any Mute/Solo box and drag to the right to hide the menu again.

Right Hidden Menu Tools

The following tools can be found by accessing the right hidden menu.



Each audio track has its own set of audio levelling controls. The functions of these controls are as follows:

Segment Levels

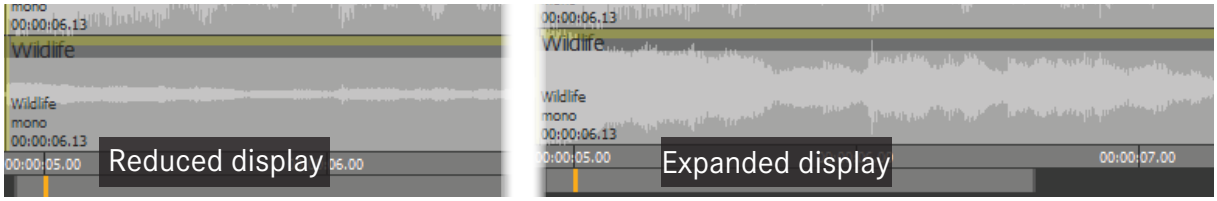
The Segment Level bar increases or decreases the volume of the segment the cursor is currently positioned on.

Track Levels

The Track Level bar increases or decreases the volume of the entire audio track.

Waveform Display

The Waveform Display bar adjusts the vertical scale of the audio waveform display on the audio track. This provides a more accurate method of editing the audio track between frame boundaries.



Modifying the audio waveform does not change the output levels, only the waveform display.

Compressor/Limiter

Click on the diagonal line found below each Track Level value box to display the Compressor/Limiter pop-up. The compressor provides a form of automatic level control. It attenuates high levels by reducing the dynamic range, making it much easier to control signals and set appropriate audio levels. Limiting is an extreme form of compression, where the output signal is sharply attenuated so that it cannot exceed a particular level.

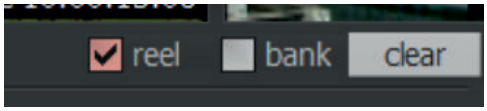
Equalizer

Click on the Graphic Equaliser graph to display a larger version of the graph in a pop-up. This three band graphic equaliser is provided for each audio track and allows accurate adjustments to be made to the audio.

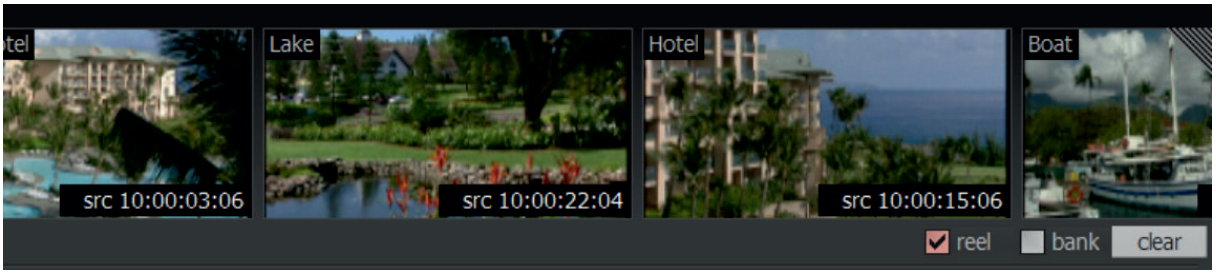
See the 'Audio Editing User Guide' for more details about audio editing and processing.

copyright © Quantel Ltd 2001-2014

Reel (Storyboard)



The **reel** tick box at the top-right of the timeline area, allows a 'storyboard' reel to be used for assembling and editing clips.



Selecting the **Reel** tick box displays the first frame of each timeline segment in a 'reel' above the timeline. Each thumbnail tile in the reel represents a clip segment on the timeline.

When using MLT FX the 'Reel' functionality is different. See the MLT FX User Guide for more details.

Inserting, Moving and Removing Clips

Insert

To insert a new clip to the timeline edit using the Reel, do the following:

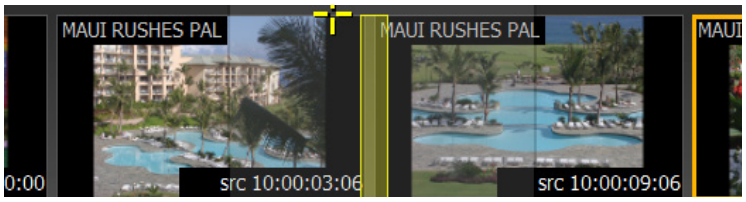
1. Select the clip to insert. This could be a clip directly from a bin, a Floating Clip or multiple clips.
2. Drag the clip(s) over the Reel.
3. A yellow highlight bar appears between timeline segments to indicate where the new clip would be inserted. Drag left or right over the Reel to select a destination for the new clip.
4. Release the clip at the required destination (highlighted yellow).

Move

To move a clip segment to a different position on the timeline, do the following:

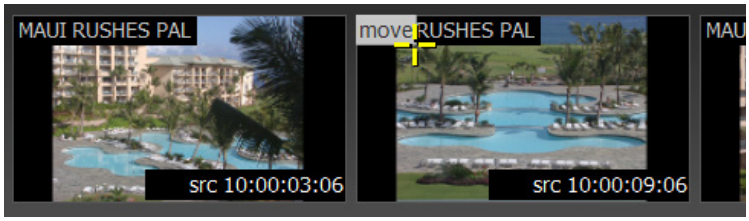
1. Click on the corresponding tile for the clip segment to be moved.

2. Drag the tile up slightly until a yellow highlight bar appears next to the tile.
3. Continue to hold the tile and drag left or right to move it from it's original position.



4 Each time the tile is hovered between two tiles the yellow highlight reappears indicating that the new clip can be inserted between these two clips.

5 Release the tile to reinsert it at the new position.



An alternative way to move a clip segment using the Reel is to hover over the top-left corner of a tile, click and hold the **move** box that appears and then follow steps 3-5 above.

Remove

To remove a segment from the timeline edit using the Reel, do the following:

1 Hover in the top-right corner of the tile to be removed until the **move** box appears.

2 Click the **move** box and drag and drop the tile onto the desktop area.

The segment is removed from the timeline and placed on the desktop as a Floating Clip.

The Reel is locked to the timeline, so moving, adding or deleting media also updates the timeline.

Copying Clips to the Desktop

Clips segments can be copied from the timeline to the desktop using the Reel. Click on the corresponding thumbnail tile in the reel and drag the tile onto an empty area of the desktop to create a copy of the segment as a Floating Clip.

Changing to 'Frames' View

Click anywhere in the current tile (ie with the orange outline) to toggle the Reel from a segment by segment view, to a frame by frame view which displays every frame of the current segment.

Navigating and Resizing

Navigate through the timeline using the Reel by clicking on the current tile and dragging left or right.

Click and drag the icon, located in the top-right of the Reel area, up or down to increase or decrease the area of the display. Click the icon once to return to the default size.

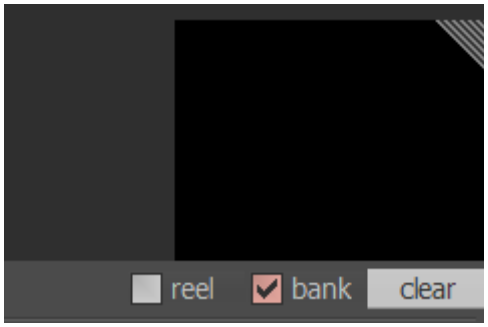
To hide the Reel, click anywhere in the Reel area and drag down. Alternatively, deselect the **reel** box at the top-right of the timeline area.

copyright © Quantel Ltd 2001-2014

Bank

The Bank function allows a number of clips to be stored for later use.

Material from the current session is retained even if the session is ended.



When **bank** is selected in the Edit Application, a blank tile appears on the right, above the timeline area.

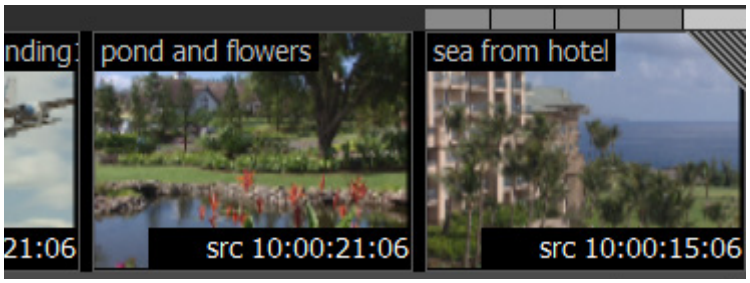
Depositing and Displaying Clips in the Bank

Clips can be deposited in the bank by dragging them from a Bin or the desktop onto the blank tile area. If an edited sequence is dragged and dropped into the Bank it is split into its individual segments.

As more clips area added into the Bank, grey horizontal tabs appear along the top of the tile display. Click on a tab to display the corresponding tile.

Drag the icon on the right up or down to increase or decrease the area of the display. Click the icon once to return to the default size.

Expanding the Bank Display



The Bank display can be expanded so that all of the tiles in the Bank are displayed in a reel above the timeline. To expand the display click on the tile image area. To collapse the display back to a single tile view, click on any of the tiles.

To scroll through the reel in the expanded view, click and hold on any of the tiles and drag left or right.

Moving Clips within the Bank

To change the order of clips within the Bank, first expand the tile view so that tiles appear next to each other (described in previous section). Click the **move** box found by hovering in the top-left of a tile. Drag and drop the tile to a new position within the Bank reel.

Clips can be dragged from the Bank's tile display and drop them onto the desktop, Clips Bin, Edit Application timeline or Edit Window. Do this by clicking and holding on the required tile, then dragging down to place the clip on the timeline or up to place it in a bin or on the desktop as a Floating Clip.

Emptying the Bank

When using a server connected product, the Bank uses cache space, so it should always be emptied when clips are no longer required. To empty the Bank, change the tile display to a single tile and then hover in the top corner of the tile. Click on the **move** box that appears and drag it onto the desktop. This forms an edited sequence of all the clips in the Bank and also empties the Bank.

The Bank function is available in other applications including I/O, Utility and Effects. For information about the Bank in other applications see the relevant user guides.

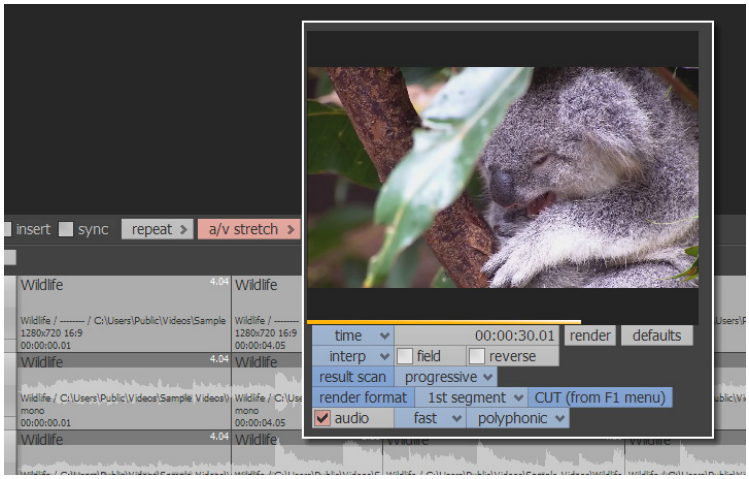
copyright © Quantel Ltd 2001-2014

Audio/Video Stretch

The **a/v stretch** feature can be used to stretch a clip or segment to a new duration in order to fill a gap or to create slow motion and fast motion effects. The **a/v stretch** feature is located at the top-left of the timeline area and in the 'more menu of

Stretching a Clip

Whole clips can be stretched or sections of a clip. To stretch a section of a clip mark in and out points before using the stretch feature. To perform a stretch, do the following:



1. Select **a/v stretch** from the top-left of the timeline area. A pop-up is now displayed providing a preview image and stretch/motion controls.
2. Set the required options (see below for more details).
3. Click **render**.

When the render is complete, **save** and **edit** boxes appear. Clicking **edit** inserts the stretched clip at the current cursor point on the Edit Application timeline.

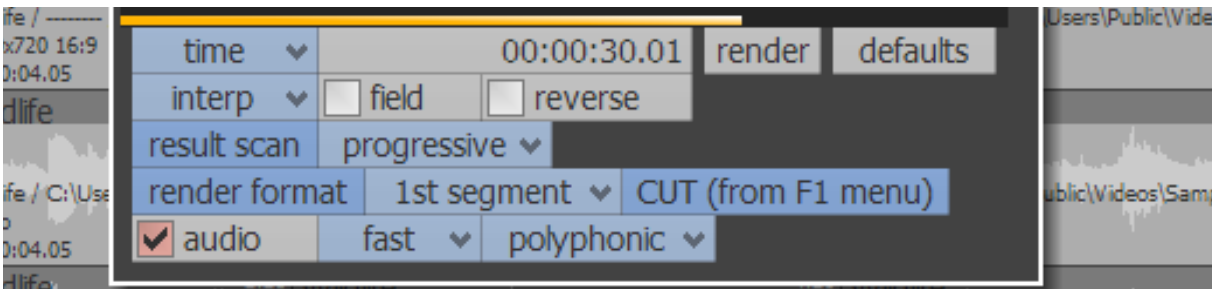
The **save** box can be used to drag a copy of the stretched clip onto the desktop. Alternatively, click the **save** box and enter the required title in the **save** pop-up to save the stretched clip in the Clips Bin.

If no title is given, the clip is saved under a default name, eg 'clip title + Stretched' (see screenshot).

Stretched segments are indicated by a pink highlight.

A/V Stretch Options

When **a/v stretch** is selected, a pop-up is displayed providing a series of possible stretch options. The pop-up can be resized by hovering over the bottom-right corner and dragging on the yellow resize icon that appears. To close the pop-up, click the yellow cross that appears when the cursor is hovered over the top-right corner of the pop-up.



Type of Stretch

The 'Type' scroll box (**time** is selected by default) allows the type of stretch to be selected from the following options:

time	Stretches the clip to the desired duration.
speed	Stretches the clip based on a percentage of the original speed.
multiple	Stretches the clip based on a multiple of the original duration.
profile	Displays a graph on which keyframe nodes can be inserted and moved to vary speed across the clip (see 'Using Keyframes to Stretch (Profile Graph)' further in this section for more information).

Interpolation Process

The interpolation process of the stretch can be controlled by selecting an option from the 'Interpolation' scroll box (**interp** is selected by default):

interp	Any new fields/frames are created by interpolating the nearest adjacent fields/frames.
nearest	Instead of creating new fields or frames when needed, the nearest existing field or frame is repeated.
replicate	If a new field or frame is required, the last one is repeated.

Field

Ticking the **field** check box determines whether any interpolation is field-based or frame-based. The **field** mode is used to prevent flickering when processing fast moving field-based images (where there is a large difference between the two fields). It is advised to use the **field** mode for material that contains fast movement and when using interlaced source material.

Reverse

The **reverse** box reverses the order of the frames to produce a clip that plays backwards. It can be stretched to a new duration as part of the reversing process or it can retain the original duration.

Result Scan

The **result scan** scroll box decides whether a clip stretch is rendered as interlaced or progressive.

Render Format

See "Rendering and Saving a Stretch" on page 3-17 for more information about render formats.

copyright © Quantel Ltd 2001-2014

Box/Cut

To the right of the render format scroll box is a box displaying either **CUT (from F1 menu)**or **BOX (from F1 menu)**. This indicates the aspect conversion and can be changed using the **Aspect Conv** setting in the **System** menu of the <F1> Configuration Window.

See "Play-out Preview" on page 3-45 for more information about box and cut settings.

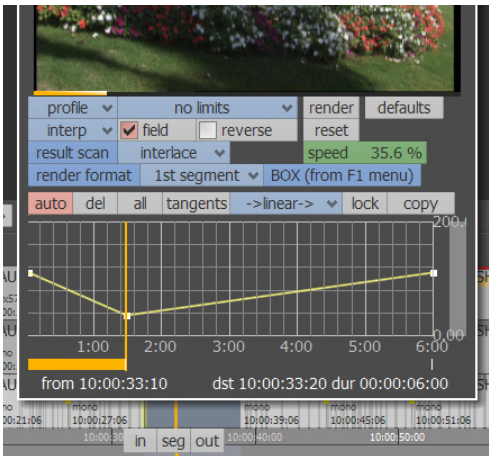
Audio

The **audio** tick box allows audio to be stretched with the video. Note that the value must be between a minimum of 50% and a maximum of 200%. If **audio** is not selected, the resulting clip does not include audio.

The 'Quality' scroll box (**fast** is selected by default) is used to select the quality of the audio conversion. Quality options include **fast**, **good** or **best**.

The 'Audio Type' scroll box (**polyphonic** is selected by default) allows the appropriate type of audio re-sampling and pitch correction algorithm to be selected. Typically, **monophonic** is used for voice and **polyphonic** for music.

Using Keyframes to Stretch (Profile Graph)

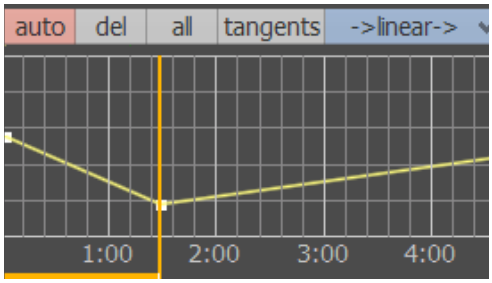


The **profile** option (located in the 'Type' scroll box; see "Type of Stretch" on page 3-14) use nodes, known as 'keyframes', to customise a video stretch.

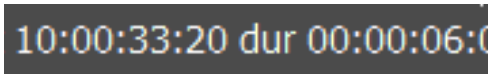
The output speed of individual frames can be set in order to establish a speed gradient between set points.

The Profile Graph

The X axis represents the frames of the clip. The Y axis represents the output speed.



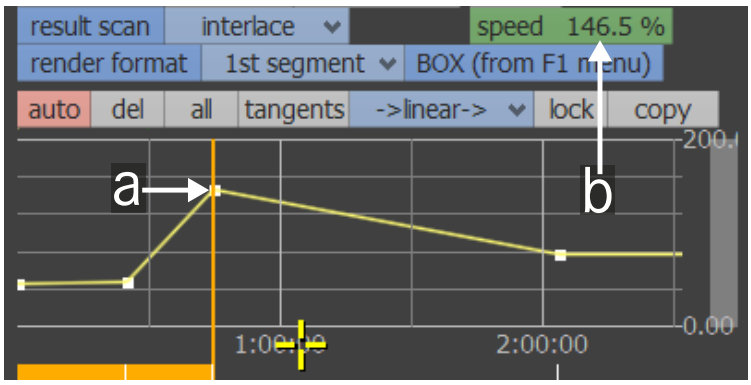
The vertical scale of the graph can be adjusted for ease of viewing by using the vertical grey bar on the right side of the graph. Clicking on this bar and dragging horizontally scales the graph (left to zoom in and right to zoom out). When zoomed in click on the bar and drag vertically to scroll up and down through the graph.



Clicking **dur** at the bottom of the profile graph switches the graph data between timecode and frame duration.

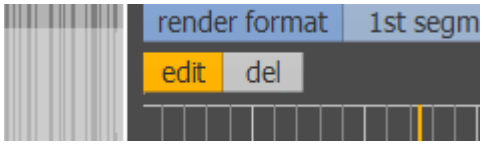
Inserting Keyframes

The method for inserting a keyframe differs depending on whether or not **auto** is enabled. To insert a keyframe with **auto** selected (highlighted pink), do one of the following:



- Click on the yellow curve on the graph. This adds a keyframe to the current frame.
- Change the percentage value in the green **speed** box. A keyframe is inserted automatically to the current frame every time the speed is changed.

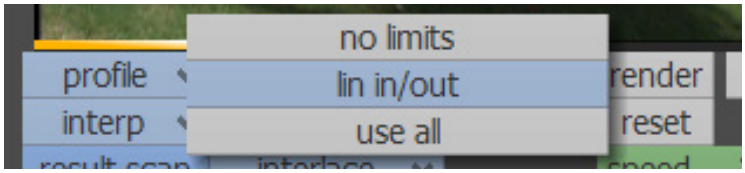
If **auto** is off (highlighted grey) then confirmation is required before any keyframes are inserted. To do this adjust the speed in the **speed** box.



The **auto** box now turns orange and displays the word **edit**. Click the **edit** box to confirm and create a keyframe node.

Profile Stretch Options

There are several Profile Stretch options to select from. Click on the scroll box to the right of the **profile** scroll box.



Select **use all** to limit the duration of the resultant clip to the number of frames available on the original clip.

No limits allows the duration of the resultant clip to exceed the amount of frames available and create a freeze on the last frame.

Selecting **lin in/out** sets a linear transition between three keyframes. The three keyframes are automatically set when **lin in/out** is selected; one at the start, one in the centre and one at the end.

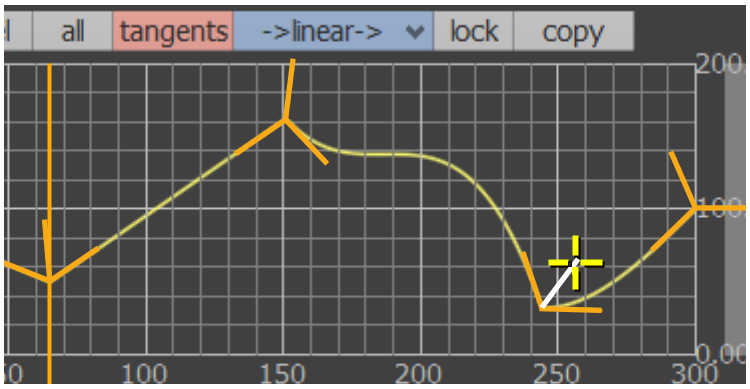
The output speed is selected as a percentage in the **speed** box (100% being normal speed, 200% being twice as fast and 50% being half as fast etc).

With **auto** enabled, the 'Transition' scroll box is revealed (→**linear**→ is selected by default). The type of transition between each keyframe can be changed by selecting a different choice from the blue scroll box.

default	Provides the best rate of change between keyframes to allow a smoother transition.
stopped	The rate of change stops as it reaches the next keyframe.
curved	The rate of change speeds up as it leaves the keyframe and slows down as it approaches the next keyframe creating a curved shape on the graph.

copyright © Quantel Ltd 2001-2014

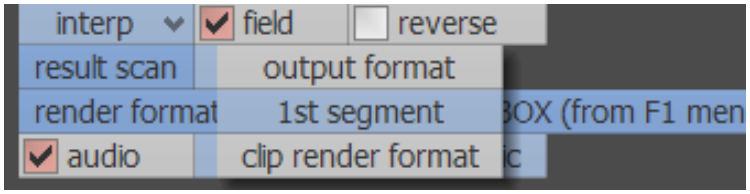
linear→	The rate of change remains constant as it leaves the keyframe.
→linear→	The rate of change remains constant as it approaches the keyframe and out of the keyframe.
→linear	The rate of change remains constant as it approaches the keyframe.
→lin,hold→	The rate of change remains constant as it approaches the keyframe and then stops until the next keyframe.
→cve,hold→	The rate of change slows down as it approaches the keyframe and then stops until the next keyframe.
user set	The rate of change on either side of the keyframe is set using the tangents on each keyframe of the curve.



When the **tangents** box is selected, orange tangent markers appear at each keyframe on the curve. These provide an alternative method of changing the shape of the curve on either side of the keyframe. Click and drag on the orange tangents to change the curve between the transitions.

See the MLT FX User Guide for more details about using keyframes and the keyframe graph.

Rendering and Saving a Stretch



There is a choice of render options available within the **render format** scroll box. The choices are as follows:

output format	Renders the stretched clip to match the output format (as set in the output format box on the Application Bar)
1st segment	This is the default setting. Selecting this renders the stretched clip to match the format of the first video segment being stretched.
clip render format	Renders the stretched clip to match the render format as set in MLT FX.

If more than one video segment is to be stretched and they have different formats (resolution or aspect ratio), a warning stating “Stretching multiple video segment formats” is presented at the bottom-right of the interface.

Click **render** to apply the stretch with the specified settings.

Stretch history is retained, even if MLT FX processes are subsequently added.

Clicking 'save' on the pop-up places a copy of the stretched clip in the Clips Bin with a default name (eg 'clip title + Stretched'). Alternatively, click and drag the 'save' box out to the desktop to create a Floating Clip of the stretched clip.

Video Stretch Techniques

Fit to Fill

To replace a timeline segment or to fill a gap on the timeline, do the following:

1. Locate the clip to be inserted into the section on the timeline.
2. Place the clip on the desktop as a Floating Clip.
3. Mark in and out points on the timeline; selecting the area that needs to be filled. If a whole segment needs to be replaced then press <T> to select the segment.
4. Drop the top-left corner of the Floating Clip onto the **a/v stretch** box above the timeline (the box's outline highlights yellow). The video stretch pop-up menu appears. The clip automatically stretches and renders the frames to the new duration, ie the marked selection on the timeline.
5. When the stretch is complete, click **edit** in the video stretch pop-up menu to place the new clip in the marked section on the timeline.

If the timeline gap is large, the stretch process takes longer, and changing the stretch parameters restarts the render process.

copyright © Quantel Ltd 2001-2014

VO (Voice Over) Function

Voice overs can be recorded directly onto the timeline using the **VO** feature located in the top-left of the timeline area.

A new audio track can be added specifically for the voice over or the voice over can be recorded onto an existing audio track. To add a new blank audio track, click the **Add Audio** box.

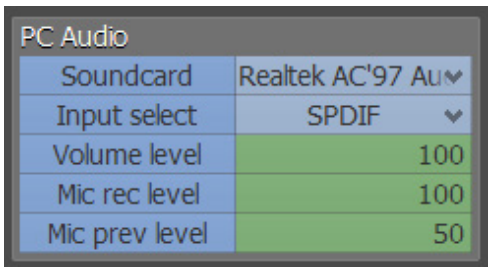
Recording a Voice Over

To record a voice over, do the following:

1. Using the Track Filter boxes, select the track to record the voice over on.
2. Ensure the timeline cursor is at the required start point.

3. Click the **VO** box. The VO menu is now displayed.
4. Select the audio input source from the first blue scroll box. The Edit Application uses either the XLR or PC (sound blaster) microphone input to record the voice over.
5. Select whether to record in **stereo** or **mono** from the second scroll box.
6. Tick the **bin** box to save a copy of the voice over in the Clips Bin as a separate audio clip.
7. Click **record** to start the recording. When a record is in progress the **record** box is highlighted pink. Click the **record** box again or <Enter> to finish the recording.

There are further options to adjust voice over settings in the **PC Audio** section of the <F1> Configuration Window.



Use this menu to select the microphone input source, and the microphone recording and preview levels.

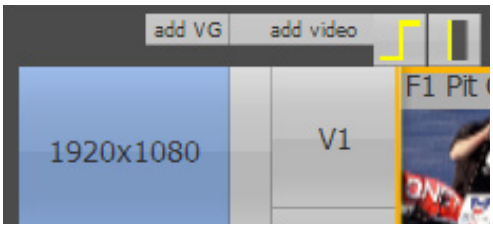
To fill a timeline gap, mark in and out points and then place the cursor slightly before the in point. Then click 'record'. This allows for lead-in time and leaves tails under the clips on either side.

See the 'Audio Editing User Guide' for more details about audio editing and processes.

Using Reference Clips

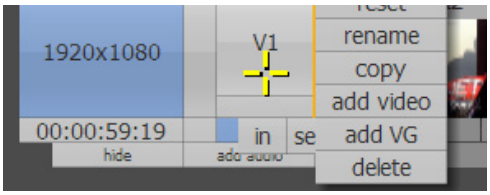
Video Guide (Shot Matching)

Shot matching between the edit on the timeline and a reference clip can be performed by placing the reference clip on a video guide track.

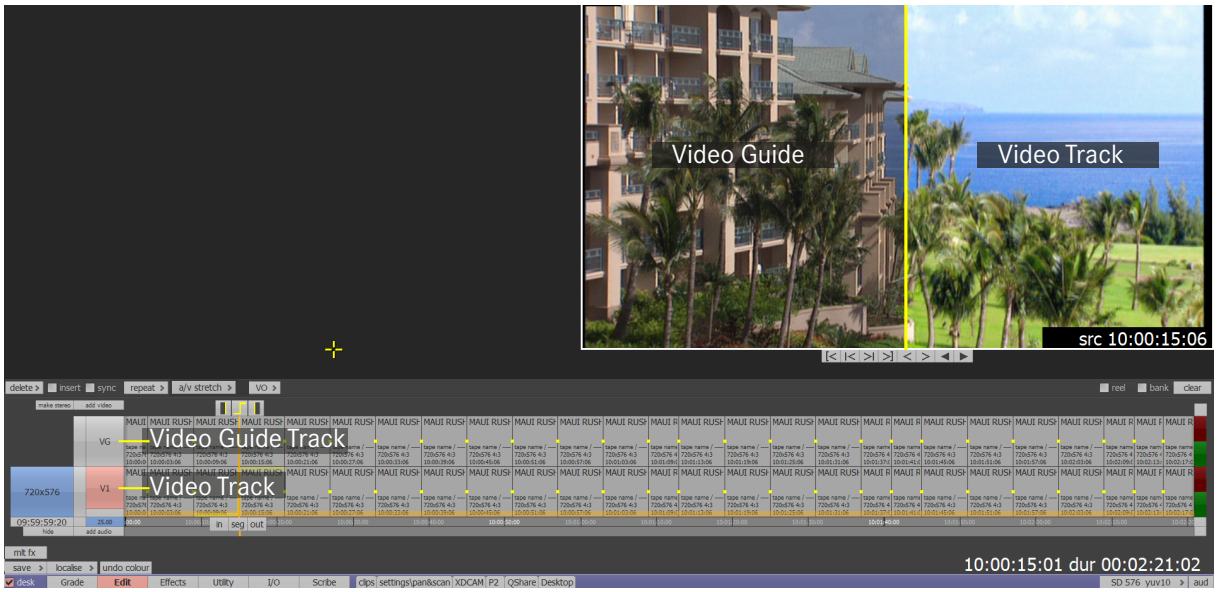


To add a video guide track, click and drag the **V1** box to the right to reveal the hidden menu on the left. Click the **add VG** box. A video guide track now appears above the existing timeline tracks. Drag and drop the reference clip onto this track.

Clips can be dragged directly onto the **add VG** box. This loads the reference clip directly onto the **VG** track.



Alternatively, right-click on the **V1** box and select **add VG** from the pop-up.



When the video guide track is open, the Edit Window splits vertically to display the reference clip on the left and the timeline clip on the right. Drag the yellow bar left or right to reveal more or less of the reference clip, or tap the bar to toggle between a vertical or a horizontal split.

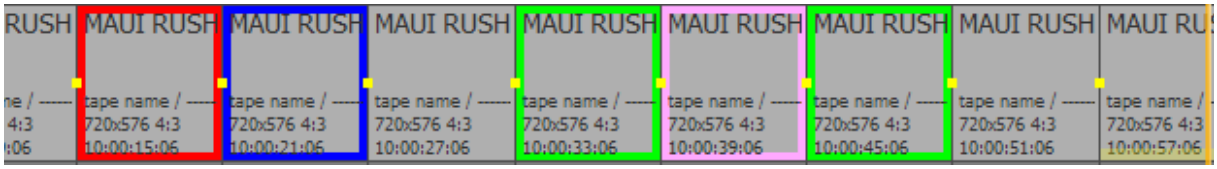
Whole clips or individual segments can be placed on the reference video track and then re-ordered and adjusted as required. To delete the video guide track, click **delete** followed by the **VG** track filter box.

When using VG in MLT FX, it is possible to toggle between a number of different viewing modes that help distinguish differences between the online and offline edit. These modes include Normal, Half Mix, Diff, Chequerboard, and Flicker.

copyright © Quantel Ltd 2001-2014

Highlights

Highlights can be enabled to provide additional information about clip segments and can be customised using the <F1> Configuration Window.

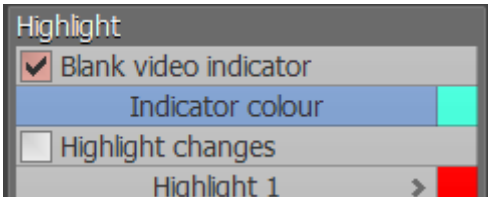


Highlights appear as a coloured outline around a clip segment.

Enable Highlights

In order to use highlights, they must first be enabled in the <F1> Configuration Window.

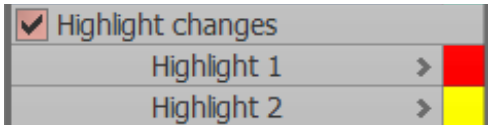
Blank Frame Indicator



In the <F1> Configuration Window, under the Highlight menu, a blank frame indicator can be activated. When selected this highlights any area of the timeline that has any timeline blank sections from a top down view.

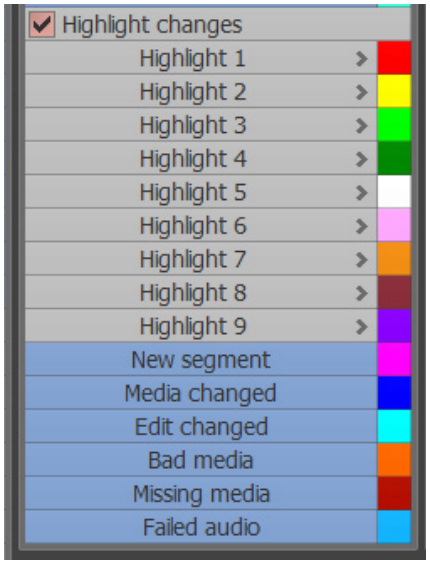
This is useful for identifying any possible blank frames on the timeline.

Highlight Changes



Open the <F1> Configuration Window and locate the **Highlight** Menu. Tick the **Highlight changes** box to enable highlights.

Customise Highlights



Highlights can be customised in the **Highlight** menu of the <F1> Configuration Window. There are 9 unassigned highlights that can be customised by the user.

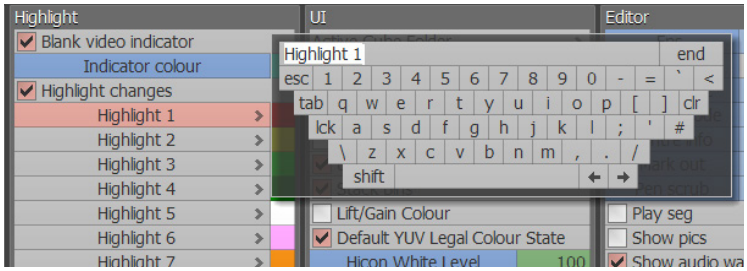
6 preassigned highlights are available. The purpose of these can not be changed. **New segment**, **Media changed** and **Edit changed** are used to indicate any changes on the timeline. **Bad media**, **Missing media** and **Failed media** are used to indicate any faults when publishing media.

Change Highlight name

To rename a highlight from the default, do the following:

1 Press the <F1> key to open the Configuration Window.

2 In the **Highlight** menu, click on the highlight name to be changed, eg **Highlight 1.**



3 A soft keyboard appears. Type in the new name using this or the external keyboard.

4 Press <Enter> or end to confirm the change.

Change Highlight Colour

To change the colour assigned to a particular highlight, do the following:

1 Press <F1> to open the Configuration Window.

2 Click on the coloured box of the highlight to be changed.

3 A colour swatch pop-up appears. Choose a colour from the mixer or use the blue scrolling box to choose between **rgb**, **yuv** or **hsl** values.

Highlight Changes

There are six preassigned highlight options in the <F1> Configuration Window's **Highlight** menu.

New segment	Indicates a segment that has no overlap with any segment in the Reference Clip.
Media changed	Shows a segment that has an overlap with a segment in the Reference Clip but is using a different rush.
Edit changed	Indicates a segment that has an overlap with a segment in the Reference Clip but has been trimmed.
Bad media	Identifies segments that contain media that cannot be published to the server due to incompatible formats, for example incorrectly sized media.

copyright © Quantel Ltd 2001-2014

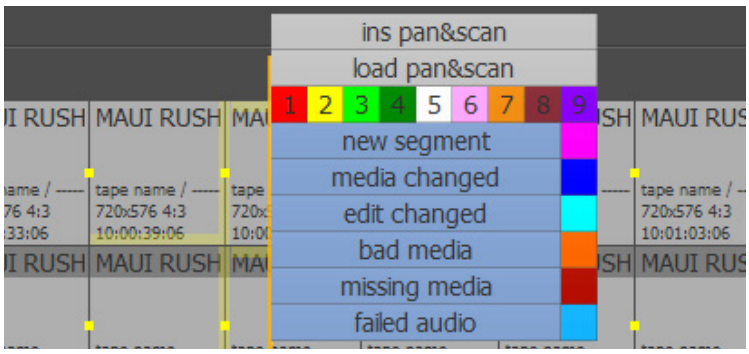
Missing media	Media originally taken from a server clip that appears on the timeline cannot be published back to the server if the original has been deleted. In this circumstance the relevant segments receive this highlight.
Failed Audio	A failed audio marker appears on the video segments to highlight the area where audio could not be published. There is be at least one segment of audio that is completely within or starts within the marked segment that cannot be published.

See "Publishing Clips" on page 5-9 for more information about the publish fail highlights.

Highlighting Segments

Highlighting an Individual Segment

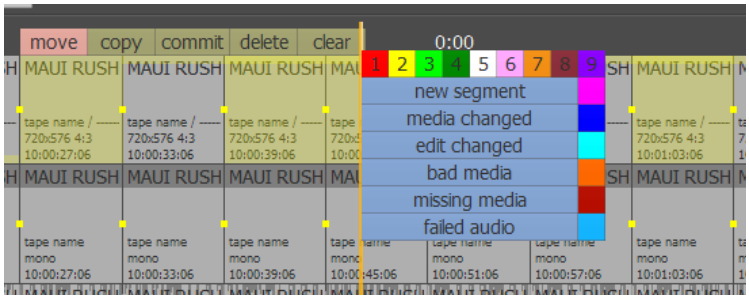
Highlights can be applied to the timeline by right-clicking or holding <Alt> and clicking on a video segment.



A pop-up appears displaying each highlight option. Click on the required highlight to apply it to the selected segment.

Highlighting Multiple Segment

To apply a highlight to multiple segments do the following:



1. Select the required segments using <Shift> and/or <Ctrl> and tapping on the segments to be included.
2. Right-click on one of the selected segments.
3. Click on a highlight colour in the pop-up. All the selected segments now highlight in the selected colour.

Applying a Process to Highlighted Segments

To apply a process to highlighted segments only, do the following:

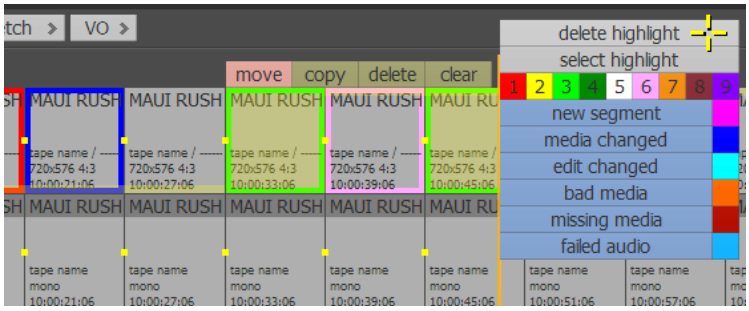
1. Right-click on one of the highlighted segments.
2. Click **select highlight**. This selects all the segments with the same highlight.
3. Apply the MLT FX process with the highlighted segments still selected.

Deleting a Highlight

To remove a highlight from a single segment do the following:

1. Right-click on the highlighted segment.
2. Click **delete highlight.**

To remove highlights from all segments that have the same highlight, do the following:



1. Right-click on a highlighted segment
2. Click **select highlight**. This selects all the segments with the same highlight.
3. Click **delete highlight**. All the selected highlights are now deleted.

Additional Controls

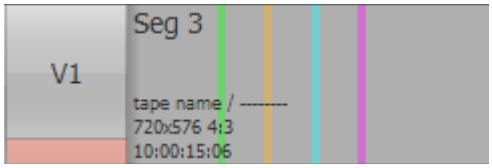
To navigate to the previous or next highlighted segment hold down <Alt> and press either the <↑> or <↓> key.

copyright © Quantel Ltd 2001-2014

Clip Logging

Overview

'Events' can be added to a clip. Events are markers that can be seen anywhere that the source clip is viewed, ie the source clip itself, or an edit that contains part or all of the source clip. This process is called 'logging'.



Each event is flagged with a coloured indicator on the timeline. There are 4 colours that can be used for event types.

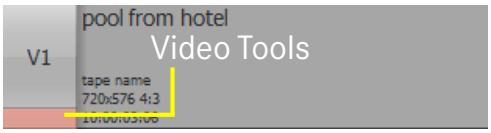
For example, if the clip is of a football match, specific colours could be associated with the following event types: goals, penalties, red cards and yellow cards.

Events cannot be added to a clip that has been trimmed or edited with other clips.

Each log event contains the following:

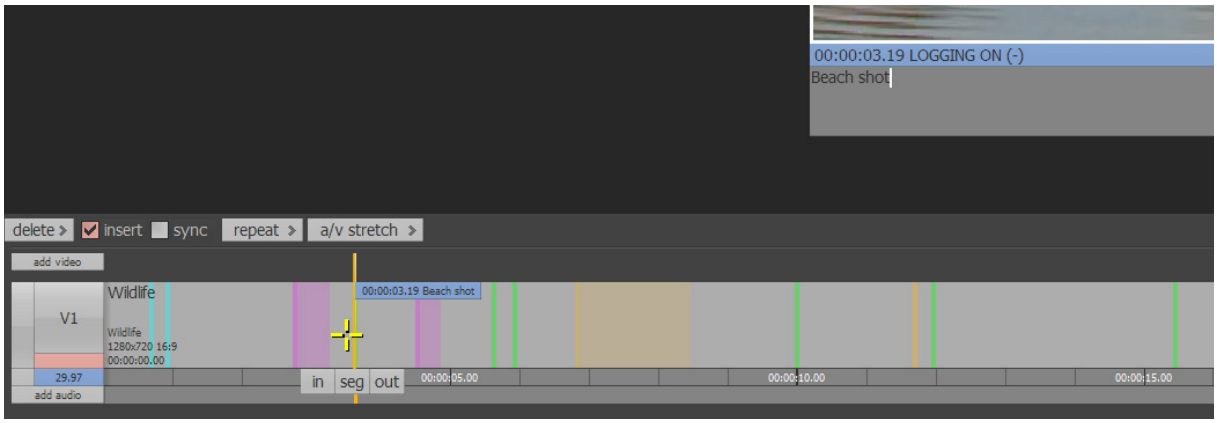
- Start source timecode
- End source timecode
- Type of event (4 user defined types available)
- Text description (multiple line text)

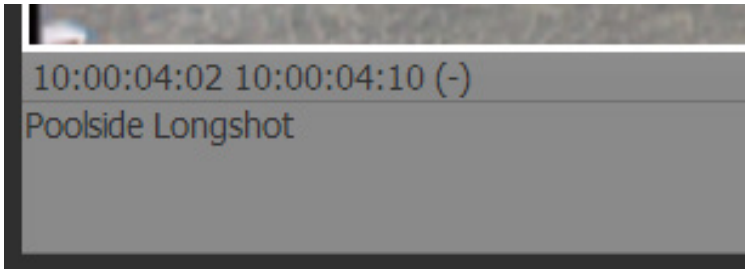
Viewing Existing Events



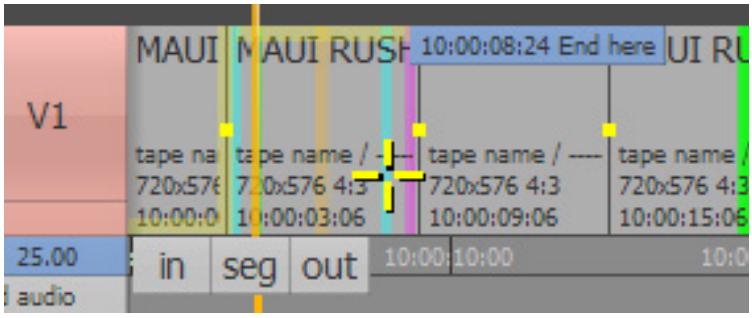
To view previously logged events, the 'log view mode' must be enabled. To do this click the 'video tools' box.

A timecode and text comment area now appear below the Edit Window, along with coloured indicators on the video track.





Use the <↑> and <↓> keys to step backwards/forwards to each logging point. Each event's timecode and text comment appear beneath the Edit Window.



Alternatively, hover over any coloured event indicator on the video track to see the event information (highlighted in blue).

Editing Existing Production Notes

To edit an existing production note on a timeline clip do the following:

1 On the timeline, select the production note that needs to be edited.

2 Press <Ctrl>+<L> to open the 'log edit mode'. The note is displayed in the logging box beneath the Edit Window. With 'log edit mode' enabled a blue **LOGGING ON** box appears in the text comment area.

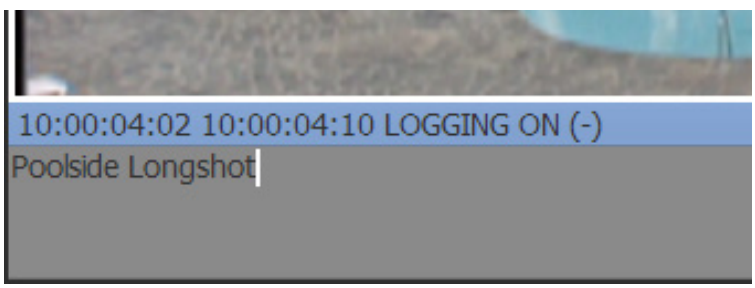
The note is editable when the timecode is highlighted in blue under the Edit Window and the words 'Logging On' are displayed next to the timecode (see screen shot). If the note is displayed in grey under the Edit Window, toggle the V1 log button on to make the note editable.

3 Edit the text in the note as required.

4 To save the edited note back to the server, press <Ctrl>+<L> again.

Creating New Events

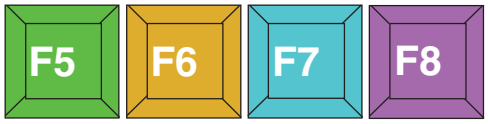
To add an event, the 'log edit mode' must be enabled by pressing <Ctrl>+<L>.



With 'log edit mode' enabled a blue **LOGGING ON** box appears in the text comment area.

copyright © Quantel Ltd 2001-2014

To log an event, do the following:



1 Press <F5>, <F6>, <F7> or <F8> . This adds a single frame coloured marker to the edit timeline.

2 Enter a comment in the comment area.

3 Events are a single frame duration by default. The event duration can be extended by navigating to the required finish point and then pressing <F12>. This adds an extended coloured marker to the edit timeline.

4 To exit 'log edit mode', press <Ctrl>+<L>. This returns the GUI and keyboard to normal operation.

Some points to remember when logging include:

- In 'log edit mode', keyboard character presses only affect text. To navigate through the timeline edit use the Active Area navigational controls or use the mouse (see "Clip Navigation" on page 2-3).
- New events can be logged while the clip is playing or paused.
- New events cannot be logged if it overlaps with another event.

Logging Roles (Server Products Only)

If logging roles are used, each of the 4 event types can have a line of default text associated with it, which gets entered automatically when an event is logged. Logging roles are set by the ISA Manager. Multiple roles can exist in the server system. To select a role look in the <F1> Configuration Menu, under **Server**, for **Logging Roles**.

Saving a Clip Log

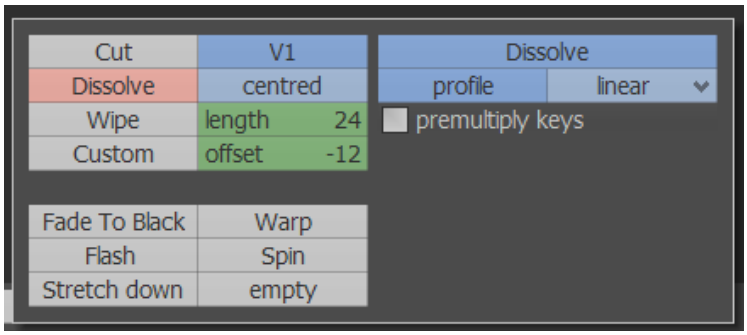
Logging metadata for the current clip can be saved by pressing <Ctrl>+<Shift>+<P> whilst the 'log edit mode' (<Ctrl>+<L>) is enabled. This creates a text file in the **C:/Data/Clip Logger** directory with a title matching that of the clip (eg 'clip name.txt'). Unsupported characters may be removed from this file name. The destination folder can be changed if required.

Deleting a Clip Log

To delete a clip log, the 'log edit mode' (<Ctrl>+<L>) must be enabled. Select the event to be deleted by clicking on the event marker on the timeline and press <Ctrl>+<Delete>.

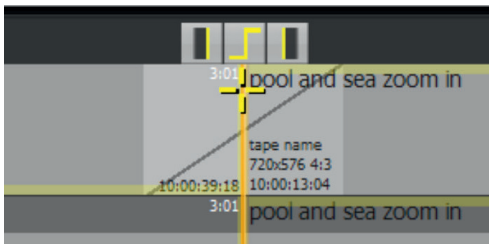
Video Transitions

Video transitions can be created or edited using either the Video Transitions Menu or the Trim/Transitions Window (See “Using the Trim/Transitions Window” on page 4-20 for more information),



To access the Video Transitions Menu, place the timeline cursor at an edit point then press <F5>. Alternatively, double-click on an edit point on the video track.

The menu appears as a pop-up above the edit point. To close the menu hover in the top-right of the pop-up and click the X or press <F5> again.



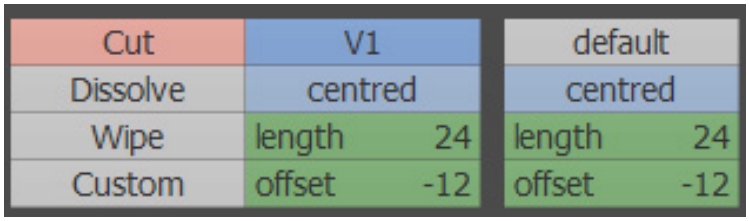
On the timeline a transition appears as a light grey highlight with a diagonal line that spans across the conjoining segments. The length and position of the grey highlight depends on the settings applied when creating the transition. (See the next section for details).

Creating a video transition does not produce an audio fade. See the ‘Audio Editing User Guide’ for details about audio editing and processes.

Transitions can be rendered automatically if the option is selected in the <F1> Configuration Window. See “Rendering” on page 5-2 for details.

Transition Types

Cuts

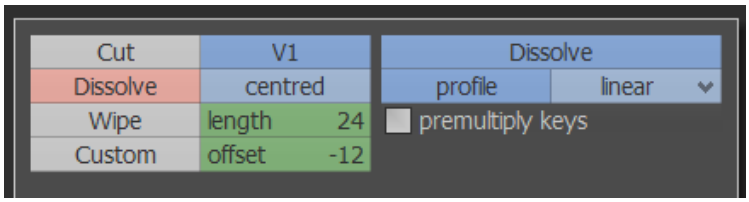


Clicking the **Cut** box removes any existing transition from the edit point and returns it to a simple cut edit point.

copyright © Quantel Ltd 2001-2014

Dissolves

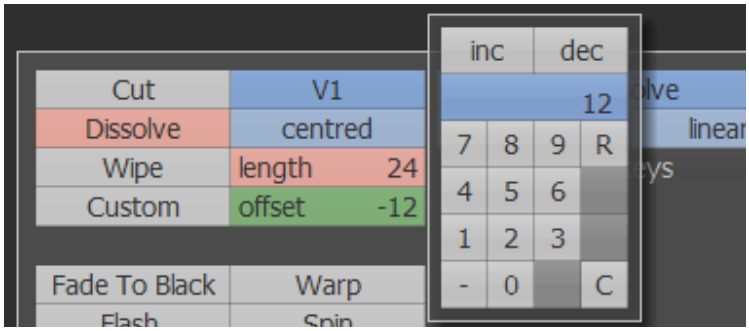
A dissolve, also know as a cross-fade, is a transition between two clip segments. During a dissolve the first segment fades out while the second segment simultaneously fades in. To produce a dissolve between two segments do the following:



1 Select the **Dissolve** box in the Video Transition Menu.

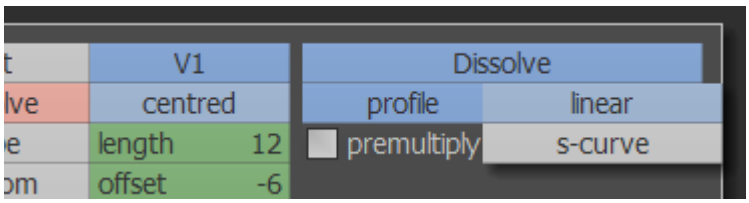
2 If required, adjust the position of the dissolve around the edit point using the blue scroll box (**centred** is selected by default). Position options available include:

centred	Produces a transition centred around the edit point.
before	Produces a transition that starts and ends in the first clip.
after	Produces a transition that starts at the edit point and continues into the second clip.
any	Allows the start point to be adjusted to provide an offset dissolve. Offset can be adjusted in the green **offset** box

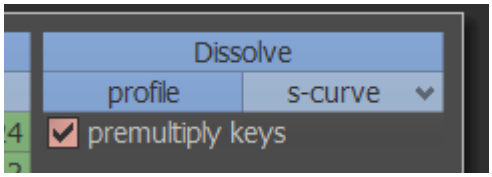


3 Enter a suitable duration in the **length** box. It is not possible to enter a value higher than the amount of tails available.

4 The **offset** value box can be used to offset the position of the transition.



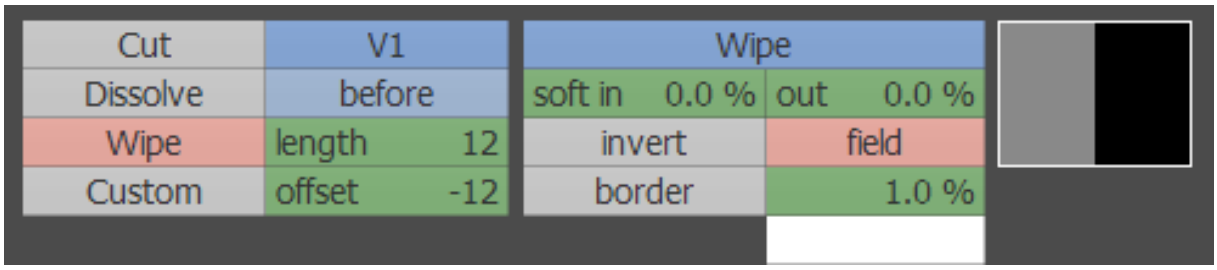
5 The dissolve profile can be chosen using the blue scroll box on the right side of the dissolve menu. A choice of linear or s-curve is available.



6 There is also an option for pre-multiplying keys for layer transitions where a key is attached to the segment.

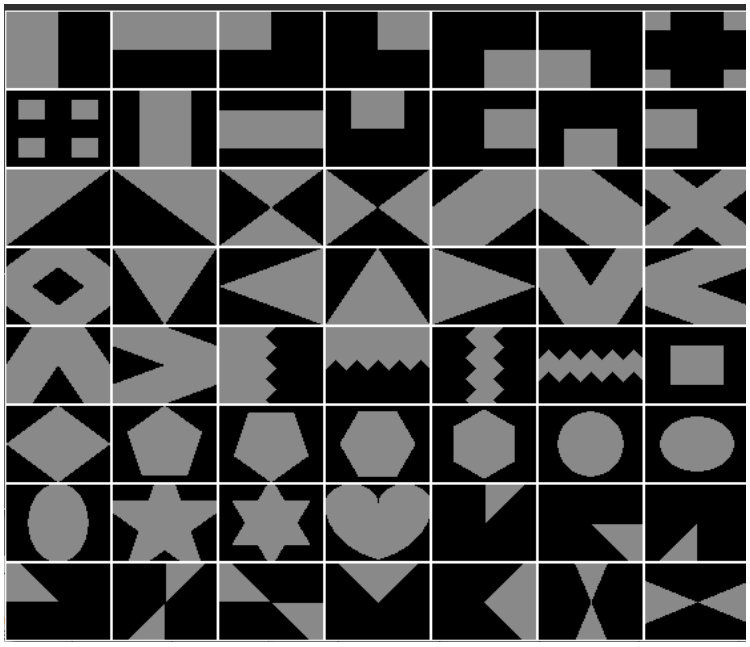
The dissolve is produced immediately after the dissolve parameters have been set up. To remove a dissolve simply click the **Cut** box.

Wipes



During a wipe transition, the first segment moves (wipes) from one side of the image frame to the other, gradually revealing the next segment. To produce a wipe between two segments, do the following:

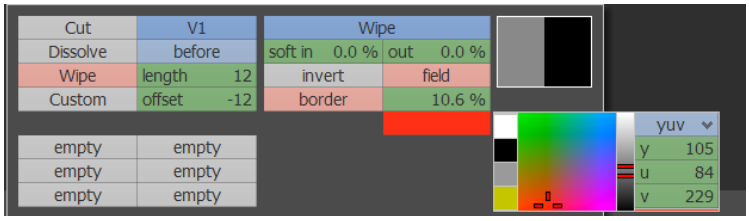
1. Select the **Wipe** box.
2. If required, adjust the position of the wipe around the edit point using the blue scroll box (**centred** is selected by default). See step **2** in the Dissolve section for descriptions of the options available.
3. Enter a suitable duration in the **Length** box. This value must be smaller than the total length of the tails available.
4. The **offset** value box can be used to offset the position of the transition.
5. Select the desired wipe style from a selection of SMPTE (Society of Motion Picture and Television Engineers) wipes by clicking on the shape box to the right of the Video Transition Menu. A vertical wipe is selected by default.



When the shape box is clicked it opens a pop-up. Click on any of the wipe styles to select them. The box closes automatically when a style is selected.

6. Both inside and outside edges of the wipe shape can be softened by increasing the values in the **soft in** and **out** numeric boxes.
7. The animations of the wipe can be reversed by clicking **invert**.
8. The **field** box determines whether to do a field based render or a frame based render. Selecting **field** produces a smoother transition and is more suitable for an interlaced system.
9. The **border** box adds a border to the wipe shape. Border width can be controlled by the green numerical box to the right of the **border** box and the colour can be selected by clicking on the colour box below.

copyright © Quantel Ltd 2001-2014



A colour swatch pop-up appears. Choose a colour from the mixer or use the blue scrolling menu to select either **rgb**, **yuv** or **hsl** values.

10 On certain shapes, it is possible to adjust the position of the shape within the image frame. Select the **position** box that appears when the style is selected and adjust the X and Y values accordingly.

To remove a wipe, click the **Cut** box.

Custom Transitions

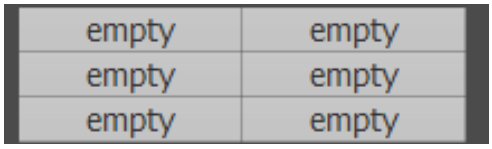
Custom transitions are created within the Effects Application. After a custom transition has been created, it can be saved into the Settings Bin as a transition setting. Custom transitions can also be shared between workstations by using the I/O Application's **Archive Out** and **Archive In** facilities.

See the Effects User Guide for information about how to create custom transitions.

See the I/O User Guide for more information about sharing settings between workstations.

Adding New Custom Transitions

Within the Video Transitions Menu, there are 6 boxes below the transition options.



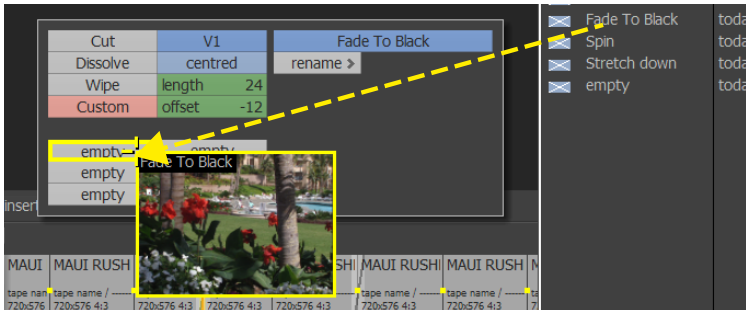
By default these display **empty.** These are custom transition buffers allowing up to six different custom transitions to be loaded into the Video Transition Menu.

To fill an empty custom transition box, do the following:

1 Open the Video Transition Menu by placing the cursor at an edit point and clicking <F5> or by double-clicking on the edit point.

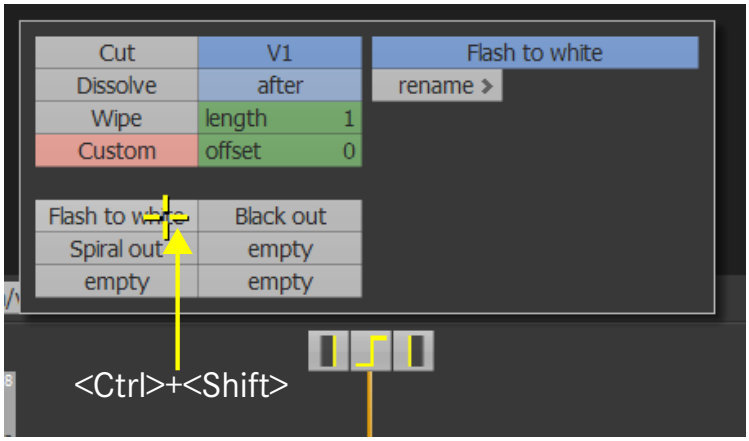
2 Open the Settings Bin by clicking the **Settings** tab on the Application Bar.

3 Locate the required transition from the bin.



4 Drag and drop the custom transition onto any of the boxes in the transition menu. If a custom transition already exists in that box the new transition replaces it.

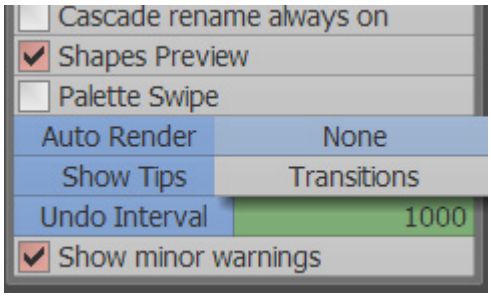
The custom transition can then be applied in the same way as dissolves and wipes. It can also be renamed if required by clicking **rename** on the top-right of the **Custom** menu.



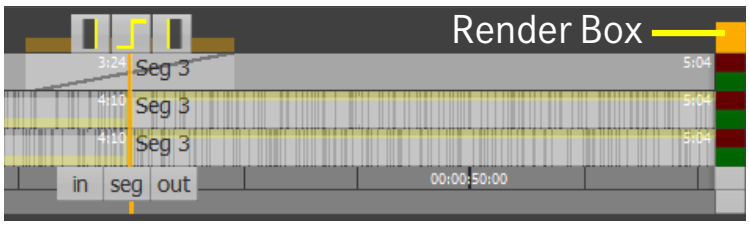
Custom transitions can be deleted from the Transition menu by pressing <Ctrl>+<Shift> and clicking on the transition.

Rendering a Transition

After a transition has been applied it needs to be rendered.



Transition rendering can be set up to happen automatically. To do this, open the <F1> Configuration Window. In the **UI** menu there is an **Auto Render** scroll box. Select **Transitions.** With this enabled, when a transition is applied or changed it is rendered automatically.



If automatic rendering is not selected, rendering must be started manually by clicking on the render box to the right of the timeline area.

The render box is orange when rendering is required, purple whilst rendering and grey when rendering is complete.

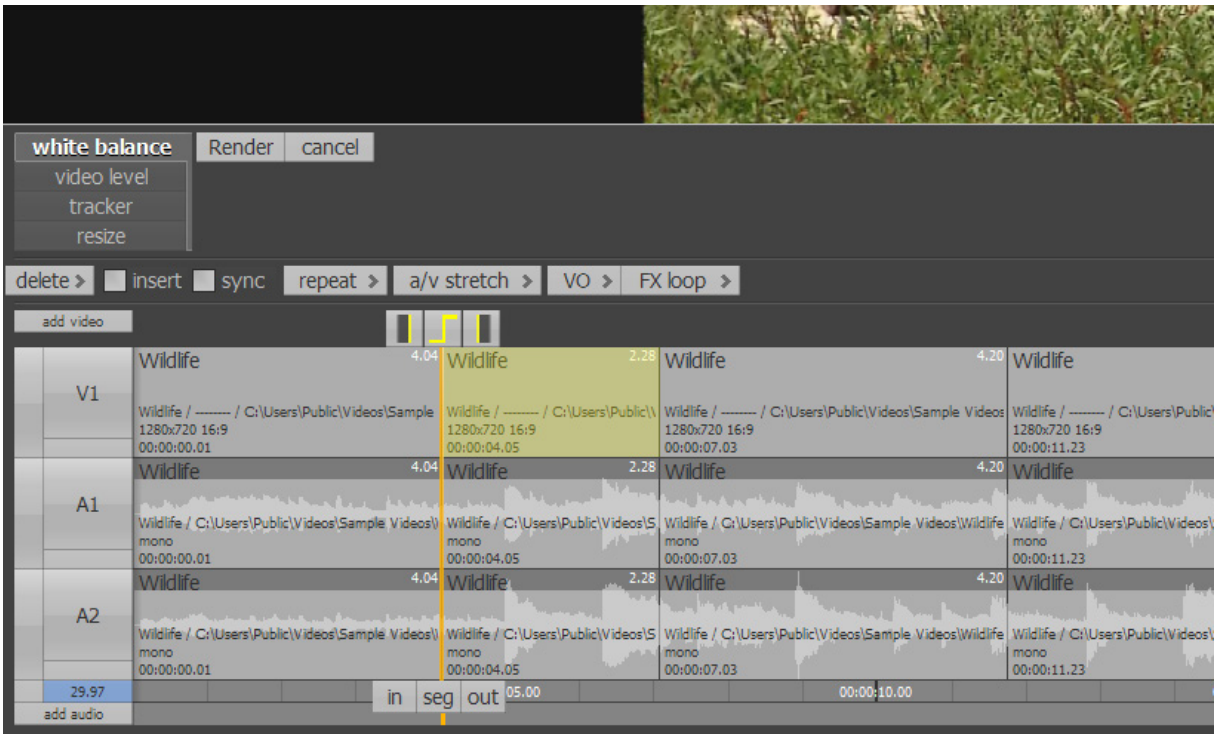
copyright © Quantel Ltd 2001-2014

The Quick Fix (<F8>) Menu

Within the Edit Application, a set of simple correction tools is available called the 'Quick Fix' or 'One Shot' menu. There are four tools available in this menu.

To use this menu, place the timeline cursor on the segment that needs to be amended and press the <F8> key.

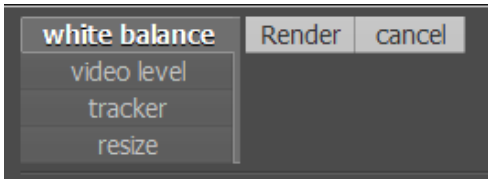
The Quick Fix menu is only available on certain products.



The One Shot menu appears above the timeline and the current clip segment on the timeline highlights orange. It remains highlighted until the process is rendered or cancelled.

Only one effect can be added at a time. To add multiple effects to the same segment, each effect must be rendered and committed individually. The tools available are as follows:

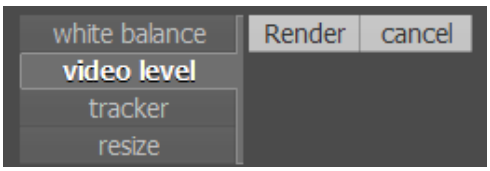
White Balance



The **white balance** tool is used to correct the current clip segment's white balance. To white balance the current clip, select the **white balance** box and then click on a black or white area of the image and a correction is applied to the whole clip segment.

Select different sample points on the image until the result is correct.

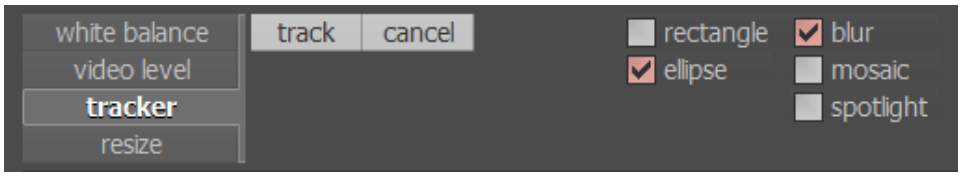
Video Level



Select **video level** to adjust the luminance levels of the current segment. To do this, first select the **video level** tab. Click anywhere on the image and drag to adjust the different luminance levels:

- Drag up to brighten the white levels.
- Drag down to darken the white levels.
- Hold <Ctrl> and drag up to brighten the black levels.
- Hold <Ctrl> and drag down to darken the black levels.
- Hold <Shift> and drag up to brighten the midtones.
- Hold <Shift> and drag down to darken the midtones.

Tracker



Select the **tracker** tab to track a specific point on the image throughout the segment and apply an obscuring or highlighting shape to it. To track the segment, do the following:

1 Click on the point within the image that needs to be tracked. For example, a licence plate, a logo or a person's face.

The track shape appears on the image. To adjust the position of the shape simply click again on the desired position until the shape is correctly placed.

2 Select the shape. The options are **rectangle** or **elipse.**

3 To change the size of the shape, hold down <Ctrl> and drag diagonally from the top-left of the image to the bottom-right.

copyright © Quantel Ltd 2001-2014

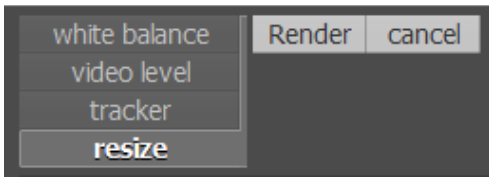
4 Select the style of track. Choices include **blur**, **mosaic** or **spotlight**.

5 Click **track**.

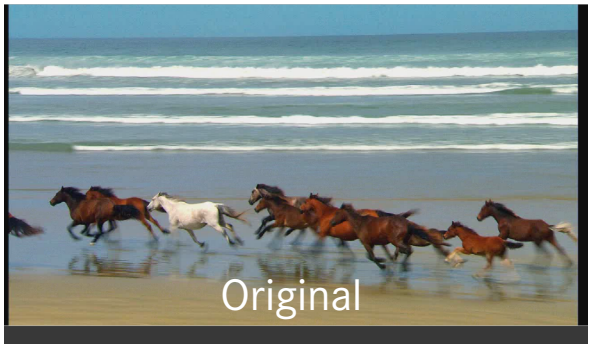
6 If the shape moves off target the track can be paused by pressing **stop**. The shape can then be repositioned and tracked again from that point by clicking **recover** located to the right of the Quick Fix menu area.

The best targets for a track should contain both vertical and horizontal components, ie a cross or intersection of two lines. Any constant pattern (eg, a circle, square or curve) that is clearly visible within the target area is ideal.

Resize



The video image of the current clip segment can be resized and repositioned. To do this, select the **resize** tab and drag up to zoom in and down to zoom out. To reposition the image, hold <Ctrl> and drag the image in any direction until the required position is reached.



Render and Commit

After any of the above effects have been added click **render** to apply the changes.

Click **stop** at any time to pause the render, or **cancel** to close the menu without applying any changes.

After the effect has been rendered a **commit** box appears. Click **commit** to confirm the changes and return to the timeline. Alternatively, click **clear** to reset any changes.

No history is saved with the effect after rendering, so changes can not be made to the effect after it has been committed.

Templating

Quantel's templating tools are available in two forms within the Edit Application. The 'User' mode (accessed by pressing the <F10> key) and the 'Designer' mode (accessed by holding down <Ctrl> + <F10>). A template is created from an Effects clip (ie a clip that was produced in the Effects Application). Any clip containing Effects history can be converted into a template by using the Template Designer menu and can then be used on any platform with a Template User licence.

Template clips are displayed with cyan bin icons.

Template Designer Mode

A template is created within the Effects application on a platform that has the Template Designer licence installed. The Designer mode decisions can be made about which layers in the template are available for modification by the end user. Layers, such as the background or main title, can be locked so that only the layers that need to be updated on a daily basis can be changed by the end user. Templates can be used to create many different styles of graphic; full frame stills, full frame animations, picture-in–picture inserts with associated keys or to create a graphic effect in an edit.

To access the Template Designer menu press <Ctrl> + <F10>. This menu is used to specify the user-changeable elements (such as video layers and text) and lock the non-changeable elements.

How to Create a Template

To create a template, do the following:

1. Create an effects clip using the Effects Application. Design the Effects clip using any of the Effects tools available eg, **Colour**, **Text**, **Graphics**, **Qplugin** etc. Animate the Effects clip using the **Dve** tools if required.
2. Render and save the Effects clip into the Clips Bin.
3. Return to the Edit Application.
4. Drop the Effects clip onto the Edit timeline and position the cursor on it.
5. Press <Ctrl> + <F10> to open the Template Designer mode.

copyright © Quantel Ltd 2001-2014

6 To the left of the Template Designer menu is a list of each of the layers contained in the clip, eg video layer, text, graphics etc. Decide which layers are to be changeable by the end user, and which are to be locked.

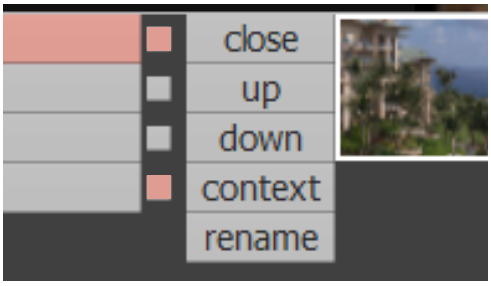
To enable a layer click on the small box to the right of that layer. Enabled boxes highlight pink. When a box is selected then the effect is changeable by the end user. Any unselected boxes are locked.

7 Select the required options for the template (See “Template Designer Menu Features” below).

8 Click **render** in the top-right of the menu.

9 After the template has been rendered, select **save** from below the timeline to save the template in the Clips Bin, or select **publish** to publish it to the server.

Template Designer Menu Features

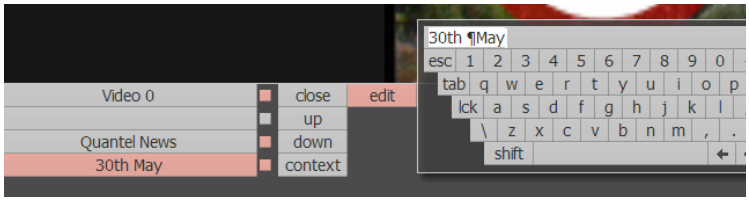


There are several options in the Template Designer menu. The **close** box closes the Designer menu and toggles to the Template User menu. Click the **setup** box to return to the Designer menu.

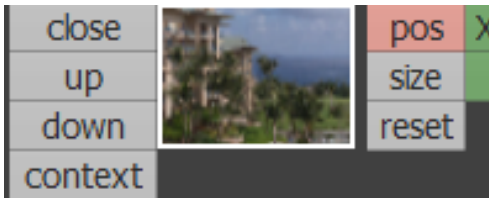
The **up** and **down** boxes re-order the layers in the template.

The **context** box is used for layers that occur later in the effects clip (ie not present on the first frame). Selecting the relevant layer, moving to the first frame where the effect becomes visible and then clicking the **context** box stores this information. This allows the end user to see this point in the effect.

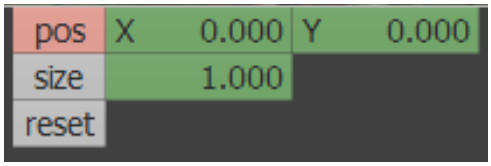
The **rename** box appears when a video layer is selected and the selected layer can be renamed from the default (eg Video 0, Video 1 etc). After clicking **rename**, use the soft or external keyboard to enter a new name and then click **end**.



When a text layer is selected, an **edit** box is displayed. This opens a soft keyboard that allows the text to be edited.



A thumbnail preview is displayed for any video layers included in the template.



Each video layer also has a **pos**, **size** and **reset** box. The green numeric boxes to the right of the **pos** box allow the video contained in that particular layer to be repositioned within the image frame.

The green numeric box to the right of the **size** box allows the video contained in that particular layer to be resized within the image frame.

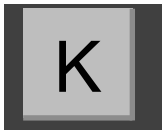
The **reset** box resets the size and position values back to their original values.

There are 3 different template types that can be applied to the effects clip in the Designer mode. The type of template chosen is reflected in the media bins; each different type has a different icon to indicate the type of template:

(Top) Any effect within the template starts at the first frame of the clip segment and continues until it completes.

(Whole Segment) The template is applied to the whole segment. Any effects within the template start at the first frame in the clip segment and continue for the duration of any effect within the template.

(Tail) Any effect within the template finishes on the last frame of the clip segment and is back-timed to start within the clip segment.



The **K** box, which appears below the template type boxes creates a key channel for the template clip.

To confirm the settings and convert the effects clip to a template, the clip MUST BE rendered. Click **render** to create the template.

Template User Mode

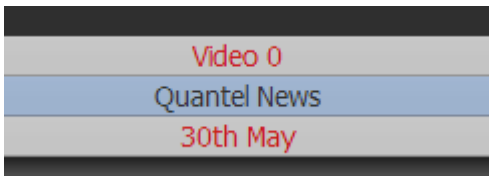
Templates can be applied to a flat timeline (**V1**) in 2 different ways:

- Drag a template from the Clips Bin and drop it on the empty timeline and then press <F10> to enable Template User mode.
- Enable the Template User mode when the timeline cursor is on an existing clip segment by pressing <F10>, then drag and drop the template into the Edit Window.

The Template User menu allows predefined elements to be edited. To open the Template User mode menu, press <F10>.

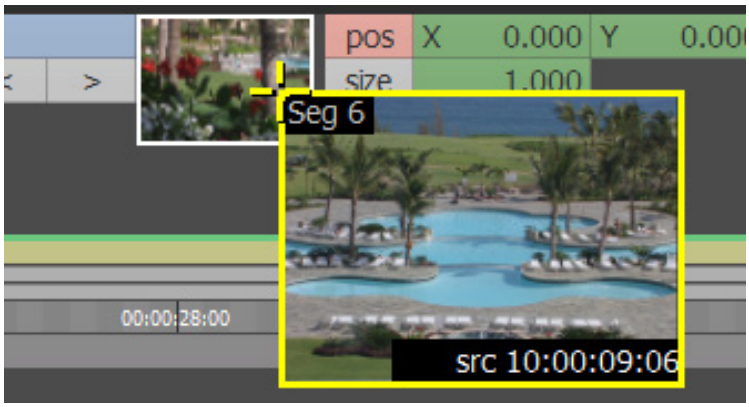
copyright © Quantel Ltd 2001-2014

Template User Menu Features

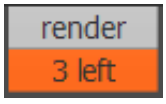


To the left of the user menu is a blue scroll box containing a list of each changeable layer in the template. Click on the box and drag up or down to select a different layer. Alternatively click on the < and > boxes to scroll through the layers.

Unchanged layers are displayed with red text. If a change has been made on a layer then the text is black.



Video layers can be substituted by dragging new clips and dropping them onto the video thumbnail of the selected video layer.



The orange box to the right of the menu area indicates how many layers that have not yet been changed eg, **3 left**. Note that it is not necessary to change every layer.

When the necessary changes have been made the template must be rendered for the changes to take effect. Click the **render** box to the right of the menu area.

The turquoise line above the segment on the timeline indicates that a template has been applied.

A beige highlight indicates that the segment is unrendered.

A chequered 'T' in the Edit Window indicates that there is an unrendered segment with an applied template.

Third Party Graphics (Option)

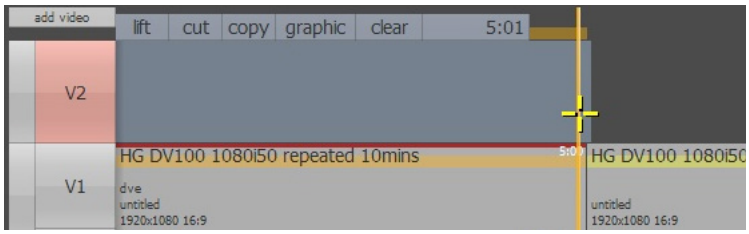
Overview

The third party graphics templating option allows access to supported third party graphics systems from within the Edit Application. A third party graphics template can be added to a multi-layer timeline. Details (eg text size and colour) can be modified, then the graphics system renders the sequence in a specific video format.

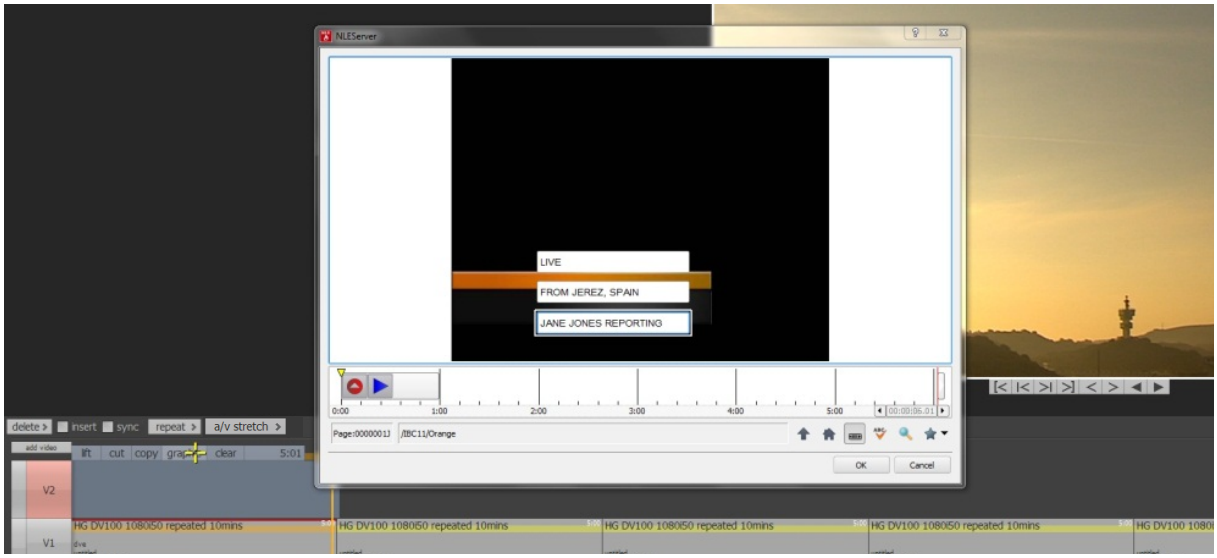
The third party graphics templating option is available on seats connected to a supported third party graphics system. Please contact Quantel for details of systems currently supported.

Add a Third Party Template

To add a new template, do the following:



1. Create a new video track using the **add video** box.
2. Select the track filter for the new track (eg **V2**).
3. Mark an in point and an out point on the new video track where the template is to be placed.
4. The blue 'lift' menu appears with a **graphic** option. Click the graphic box. Available graphics templates appear in the template browser.



5. Select a template in the browser and if required, change any configurable parameters (these depend on the graphics system), eg font, colour, opacity etc.

copyright © Quantel Ltd 2001-2014

6 Click the **OK** button to insert the graphics segment within the marked section on the timeline. The templated segment appears with a red 'key channel' indicator. Orange 'unrendered' indicators also appear on the segment and on the right of the timeline.

7 Playback the new segment, and if there are no more changes required, render the template by clicking the render box to the right of the timeline.

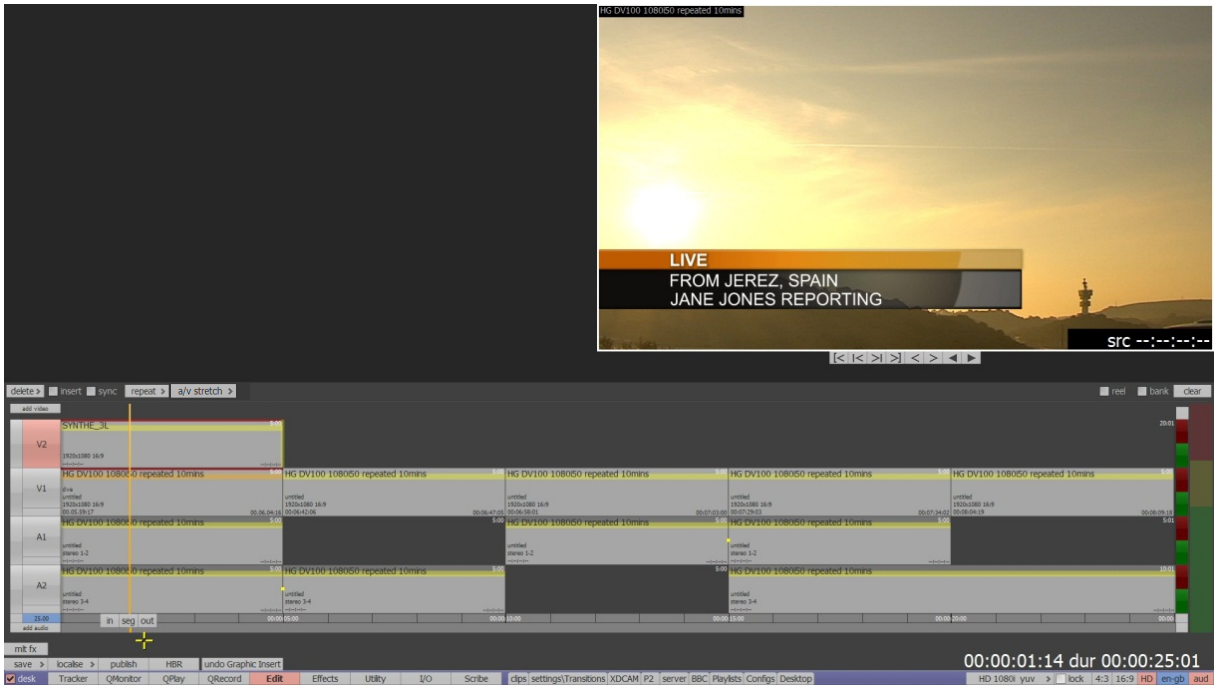
8 To make subsequent changes, select the template segment on the timeline by clicking **seg** or <Ctrl>+<T>.

9 Select **graphic** in the 'lift' menu. This displays the template menu.

10 Update any changes.

11 Click **OK**.

12 Render the changes.



If the 'copy' box on the blue 'lift' menu is clicked, a Floating Clip of the template key channel is created.

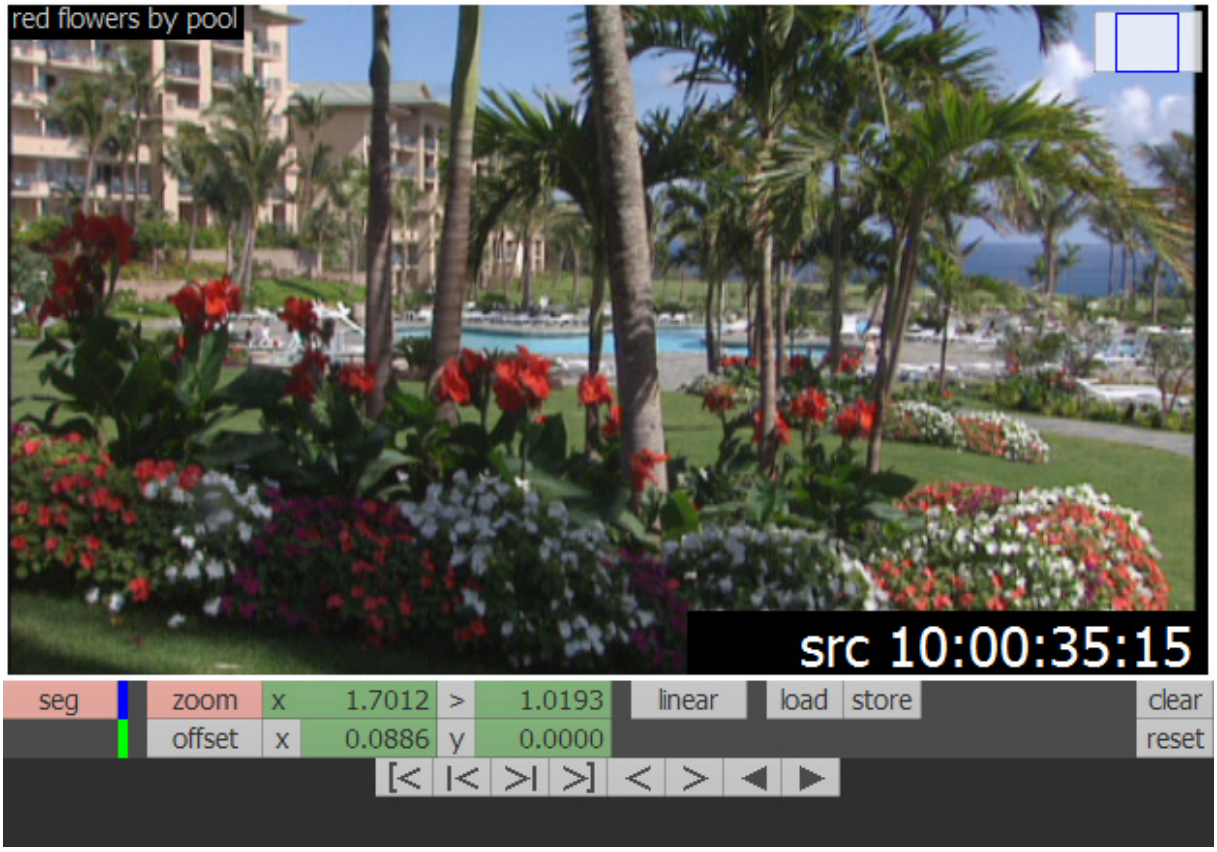
Pan & Scan

Edit Window Functions

Pan & Scan allows the video image to be resized and repositioned within the Edit Window.

The Pan & Scan function is not available on sQ products.

To display the Pan & Scan menu, hover over the top-right corner of the Edit Window to display a light grey box. When this box is clicked the Pan & Scan menu displays below the Edit Window, as shown in the following screen shot. Note that the Pan & Scan box remains in the top-right corner of the Edit Window if a Pan & Scan setting has been changed on the current segment.



The safe area can be displayed in the Edit Window by pressing the <F3> key on the keyboard.

Pan & Scan Menu Options

With **seg** selected, any changes to position and size are made to the currently selected clip segment only.

With **track** selected, all changes to position and size, made at any point on the track, are applied to the whole track except for segments that have already had individual Pan & Scan settings applied.

copyright © Quantel Ltd 2001-2014

The zoom settings can be controlled by selecting **zoom** and adjusting the **x** and **>** values in the green numeric boxes. The **>** box locks the axis so that the x and the y zoom values are locked together. Select the **offset** box to enable offset adjustment. The **x** and **y** numeric boxes allow the x and y co-ordinates to be adjusted.

By default the transitions between size or position changes are cushioned (curved). With the **linear** box enabled before any changes are made, the transitions are linear.

The **store** box allows the current Pan & Scan settings to be held in a temporary buffer so that they can be applied elsewhere on the edit.

The **load** box allows the currently held Pan & Scan settings from the temporary buffer to be applied to the current segment.

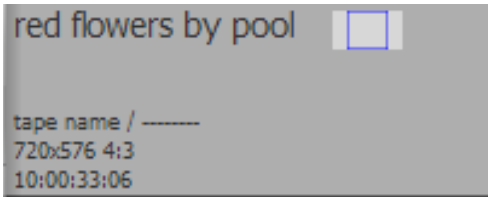
The **clear** box clears all Pan & Scan keyframes.

Select **reset** followed by **seg** to reset the Pan & Scan settings of the currently selected segment. Select **reset** followed by **track** to reset the Pan & Scan settings for the whole track.

Saving and Transferring Settings

Pan & Scan keyframes for the whole edit can be saved in the Settings Bin so that they can be transferred to another project. Any saved settings can be dragged from the Settings Bin and dropped on the timeline where they are applied to the new project.

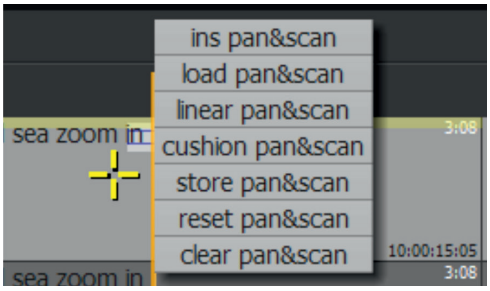
Timeline Track Controls



When a Pan & Scan setting is adjusted a keyframe is created on that frame. The keyframes are indicated on the video track as a blue square within a white box (see screenshot to the left)

The keyframes can be moved to a new position on the timeline by holding down the <Ctrl> and hovering over the keyframe marker. A vertical yellow bar appears on the side of the marker. Click and drag on the bar to move the keyframe to a new position.

Pan & Scan keyframes can be deleted by clicking **delete** and then clicking the unwanted keyframe marker.



Additional Pan & Scan controls can be located by right-clicking on any of the existing Pan&Scan keyframe markers on the timeline. The following options are available:

ins pan&scan	Inserts a Pan & Scan keyframe at the current frame in clip segment.
load pan&scan	Loads currently stored Pan & Scan settings from the current frame onwards.
linear pan&scan	Makes the change in size and position to be linear for the current clip segment.
cushion pan&scan	Makes the change in size and position to be cushioned (curved) for the current clip segment.
store pan&scan	Stores the current Pan & Scan settings in a temporary buffer so that they can be applied elsewhere on the edit.
reset pan&scan	Resets the Pan & Scan from the current frame onwards.
clear pan&scan	Deletes all the track's Pan & Scan keyframes.

Stereo3D Functions

On platforms with the Stereo3D option, push and convergence controls are also available from the Pan & Scan menu; see the Stereo3D User Guide for details.

copyright © Quantel Ltd 2001-2014

Play-out Preview

An edit can be previewed locally at any stage on products with an SDI out. Play-back may not be smooth if the clip needs rendering (see 'Rendering' in Chapter 5 for more information).

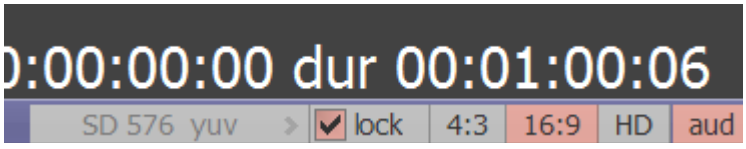
A range of player formats are available such as SD, HD, 2K, Quad, 4K etc. If a clip is played out at a different frame rate, the system has the ability to change the audio pitch, add a 2/3 field or a frame pull-down.

Display Format Settings

When an output monitor is connected, a Display Format box is displayed on the right of the Application Bar. This box shows the specific output/play preview format currently being used. The settings can be edited by clicking on the blue Display Format box (which turns pink, as seen in the screenshot) to open the Display Format menu.

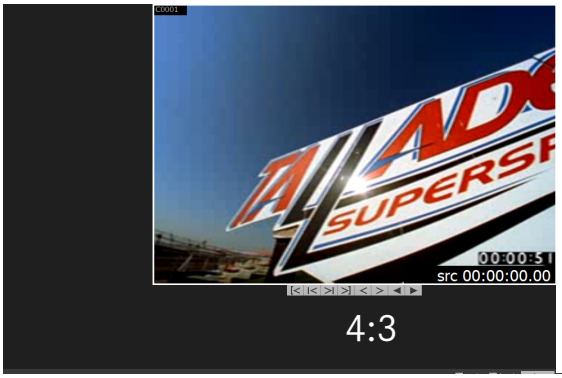
For workstations with the stereo option, both outputs can be locked together using the single SDI stereo out control

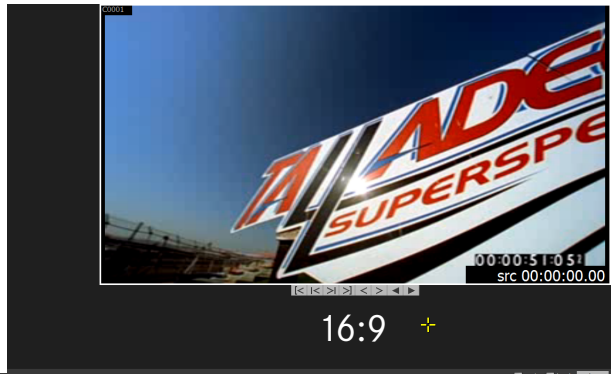
Aspect Ratio Settings



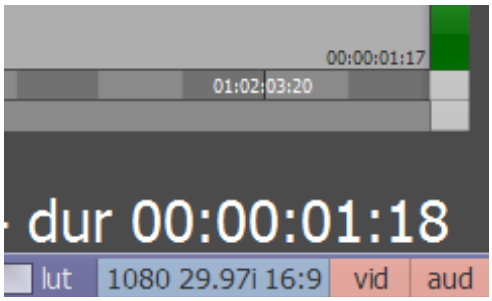
When using a software product (ie with no output card), three additional boxes are displayed: **4:3**, **16:9** and **HD**.

These boxes are for setting the play-out aspect ratio when connected to a clean output display. When one of the options is selected the Edit Window changes size and shape to reflect the chosen aspect ratio.





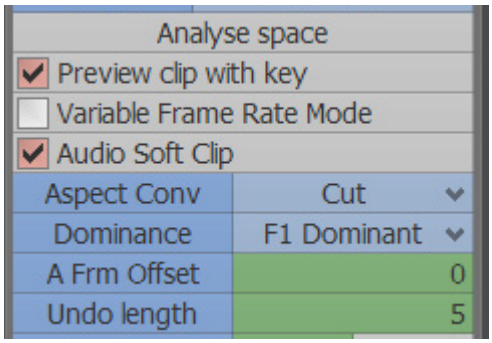
Enable Video/Audio Display



At the bottom-right of the Application Bar there is a **vid** box and an **aud** box. These control the video and audio output. If the **vid** box is enabled it highlights pink and video is output to a display monitor (if available). If the **aud** box is enabled it highlights pink and audio is output to external speakers. To enable/disable the video or audio output simply click on the **vid** and/or **aud** box.

Box/Cut Settings

When playing-out material with a different aspect ratio from the play-out device (for example, playing out 4x3 material to a 16x9 output) the display style needs to be selected using the **box** or **cut** settings.



In the <F1> Configuration Window, within the **System** menu, there is an option to change the aspect ratio display of the material.

Using the **Aspect Conv**(ert) tool select how the media is resized to fit the Edit Window and output display.

There are two options available: **box** and **cut**.

The 'box' and 'cut' options are display and play-out settings and have no effect on the physical media, ie no actual crop or resize is taking place.

Box

With **box** selected, the image is displayed within the outer edges of the Edit Window/ output monitor. The **box** option avoids cutting the horizontal edges off the picture by placing the full picture in the box. This results in black space (pillars) down the sides of the image.

copyright © Quantel Ltd 2001-2014

Cut

With **cut** selected the image is resized so that it fills the whole Edit Window/output monitor. This results in the vertical edges being 'cut' from the display.

copyright © Quantel Ltd 2001-2014

Editing Tools

Marking a Section

There are a number of ways to mark a section using the timeline controls. These methods allow you to either select the whole timeline, the current segment, mark in and out points on part of the segment, or mark in and out points across multiple segments. You can isolate the selection to specific tracks by clicking on the relevant filter boxes (eg **V1** and **A1**) either before or after you've marked a section.

See "Marking a Section" on page 2-4 for information on marking a section using the Edit Window controls.

Selecting the Current Segment

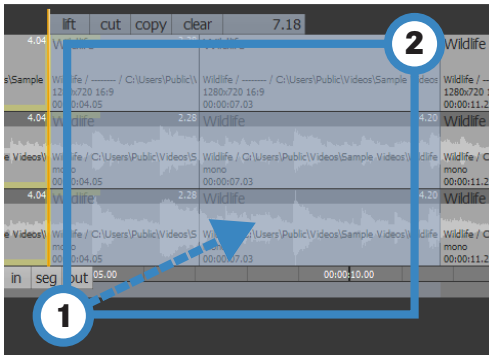
To select a whole segment, first place the cursor on the segment you want to select, then do one of the following:

- At the bottom of the cursor, click **seg.**

OR

- Press <T> on the keyboard.

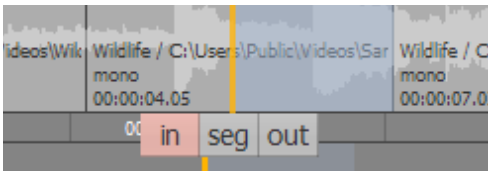
Select Using a Lasso



For an alternative method of marking a selection on the timeline drag the cursor from the bottom-left below the timeline to the top-right, to select the desired segment(s).

Marking In and Out Points

As well as being able to select a complete segment, you can also use in and out points to specify a selection. To mark in and out points using the timeline controls, you can either:



- Place the cursor at the required point on the timeline and click the **in** box that appears at the bottom of the cursor. Place the cursor at the required out point click the **out** box.

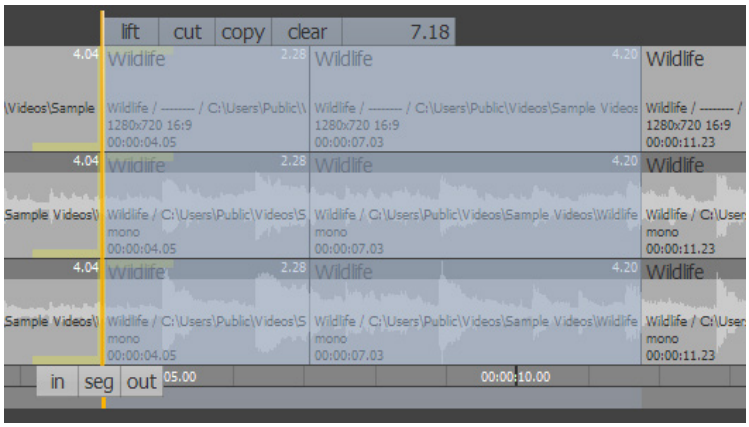
OR

- Press <I> or <E> on the keyboard to mark an in point and <O> or <R> to mark an out point.

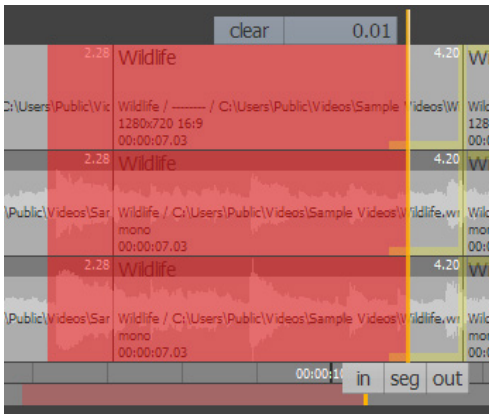
Selecting specific track boxes (eg 'V1', 'A1' etc) isolates the selection to that particular track.

copyright © Quantel Ltd 2001-2014

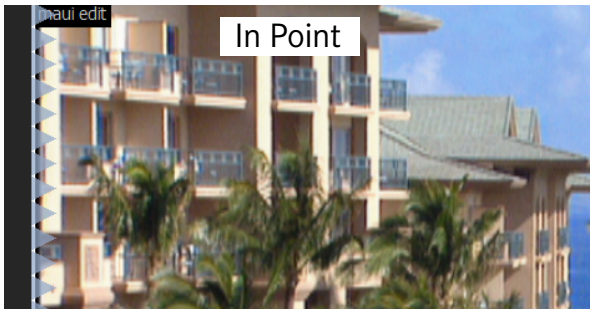
Selected Segments

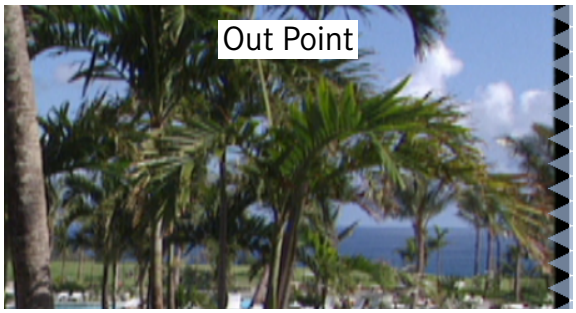


When in and out points have been marked the section between the markers is highlighted blue and the Lift menu appears. Note that if only an in point is marked then the selection highlight continues to the end of the clip.



A red highlight indicates invalid point placements; for example, if the out point has been placed before the in point.





The in and out points are displayed in the Edit Window with blue markers along the vertical edges of the image; the blue marker on the left represents the in point and the blue marker on the right represents the out point.

Checking, Playing and Deleting Marks

Check the marked segment by using these quick keyboard shortcuts:

<6> Plays the marked segment

<Q> Jumps to the in point

<W> Jumps to the out point

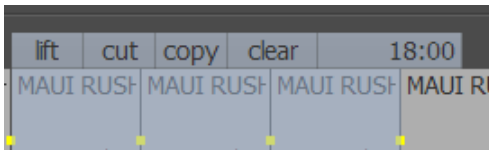
<G> Removes the in and out points

<D> Removes the in point.

<F> Removes the out point.

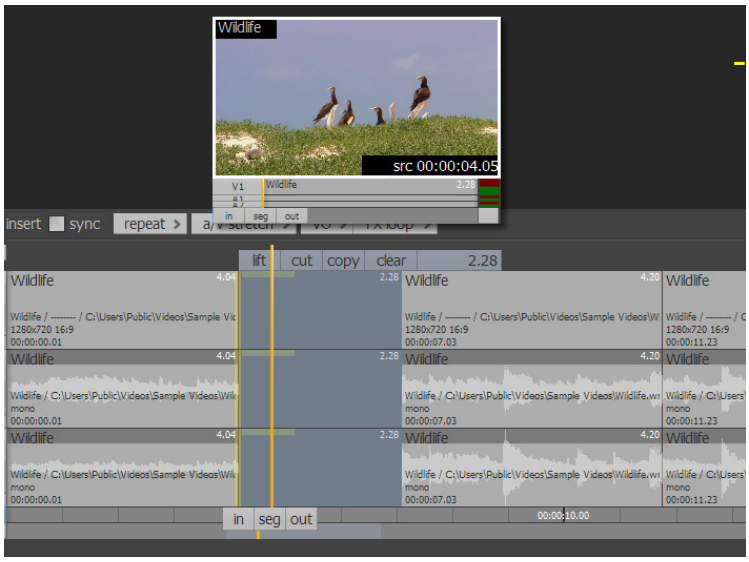
The Blue ‘Lift’ Menu

When you mark a section on the timeline, the blue ‘Lift’ menu is displayed.



The Lift menu tools allow the segment to be lifted, cut or copied from the timeline. The duration of the segment is displayed to the right of the ‘Lift’ menu.

Lift Tool

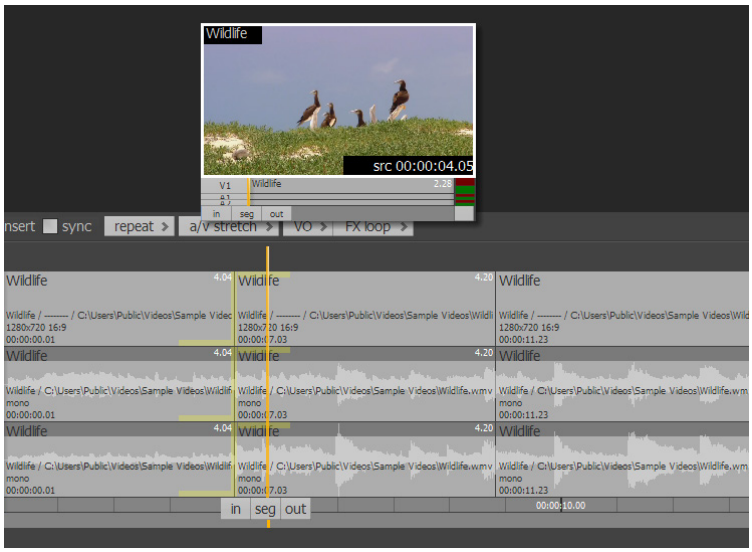


Clicking the **lift** box lifts the selection from the edit, leaving a gap on the timeline. The selection is placed on the desktop as a Floating Clip directly above the timeline.

Clicking and dragging on the **lift** box allows you to place the Floating Clip in a desired location on the desktop, in a bin or into another application.

You can also press <Z> to lift the selected material from the timeline. This method lifts and removes the material without creating a Floating Clip.

Cut Tool



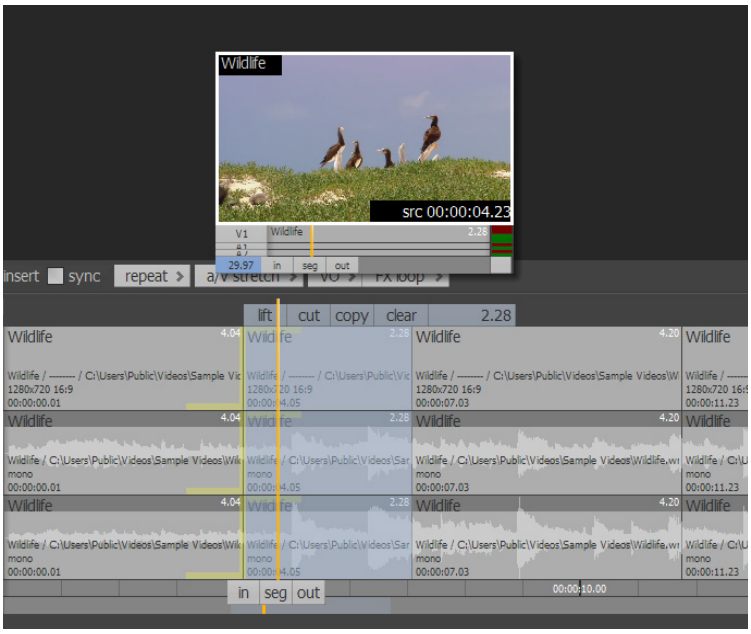
Clicking the **cut** box removes the selection from the edit and closes the gap on the timeline. The cut selection is placed on the desktop as a Floating Clip directly above the timeline.

Clicking and dragging on the **cut** box allows you to place the Floating Clip in a desired location on the desktop, in a bin or into another application.

You can also remove the selected material from the timeline by pressing <X>. This method cuts the material without creating a Floating Clip.

copyright © Quantel Ltd 2001-2014

Copy Tool



Clicking the **copy** box makes a copy of the selection and places it on the desktop as a Floating Clip.

Clicking and dragging on the **copy** box allows you to place the Floating Clip in a desired location on the desktop, in a bin or into another application.

Clear Tool

Clicking **clear** removes the in and out marks and closes the blue Lift menu. Alternatively, press the <G> key.

Third Party Graphics Templating (Option)

In some circumstances the 'Lift' menu also displays a **graphic** option that allows third party graphic templates to be inserted. This applies to certain multi-layer timeline workstations.

See "Third Party Graphics (Option)" on page 3-40 for more information about the third party graphics option.

The Yellow ‘Move’ Menu

The yellow ‘Move’ menu provides tools to **move**, **copy**, **slip**, **slide**, **commit** and **delete** clips from the timeline. The yellow Move menu is for editing full segments rather than a marked selection using in and out points. To open the yellow Move menu double click on timeline segment.

The yellow Move menu retains clips within the timeline (ie it doesn’t create Floating Clips on the desktop like the blue Lift menu).

Selecting Segments

Select a Single Segment

You can select a single segment and access the Move menu, in several different ways:

- Click and drag the cursor from top-left to bottom-right over the desired segment.
- Press <Shift> and click on the segment.

  OR

- Double-click on the segment.

Select Multiple Segments

To select multiple segments and access the yellow Move menu, do one of the following:

- Click and drag the cursor from top-left to bottom-right over the desired segments.
- Press <Shift> and click on a segment. Continue to hold <Shift> and click on another segment. Both these segment and all segments in between are selected.

- Press <Ctrl> and click on a segment. Continue to hold <Ctrl> and click on multiple other segments to add them to the selection. This method allows you to select multiple non-contiguous segments. See ‘Multiple Segment Select’ later in this section for more information about selecting multiple non-contiguous segments.

Slip and Slide operations are only applicable if the selection is a single segment or a contiguous block of segments.

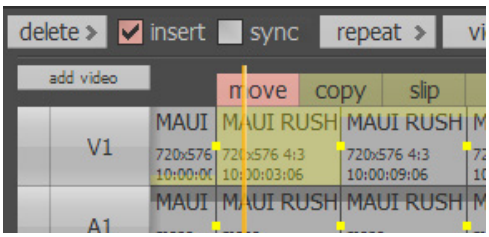
The track filter boxes to the left of the timeline can be used to control which tracks are included in the selection. This can be done before or after the selection is made.

copyright © Quantel Ltd 2001-2014

Move Menu Tools

Move Tool

The **move** tool allows you to move the selected segment(s) to a new position on the timeline.



To do this, click the **move** box and drag the selection to a new position. Note that when the selection is placed in it's new position it overwrites any frames that it overlaps; to prevent this select **insert** from the top-left of the timeline area before moving the selection.

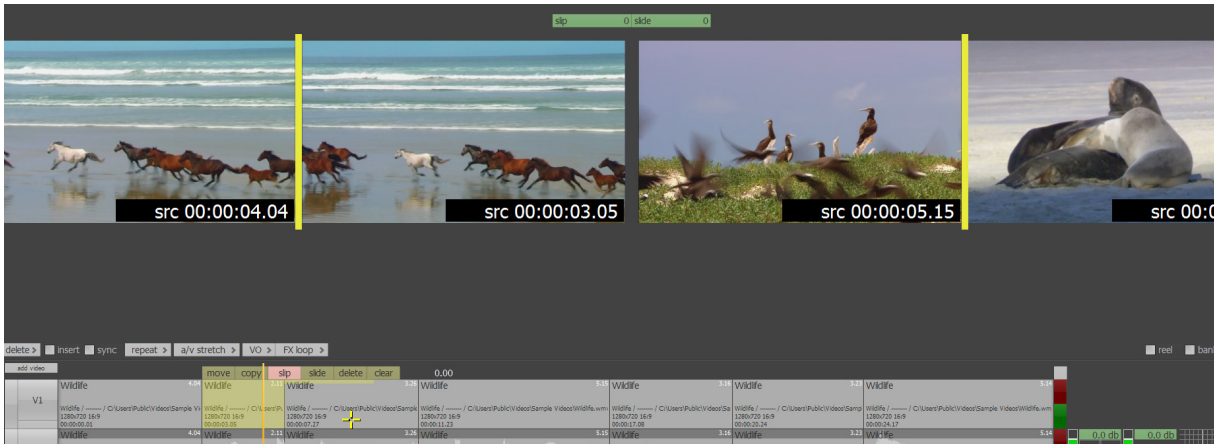
Copy

The **copy** tool allows you to create a copy of the selected segment(s) and place the copy at a new position along the timeline. To do this, click the **copy** box and drag the selection to a new position. Note that when the selection is placed in it's new position it overwrites any frames that it overlaps.

Slip

The **slip** tool allows you to adjust the content of the selected segment without moving the position or changing the duration of the segment itself. This is only possible if the segment has tails. To slip the content of a segment, click the **slip** box and drag left or right.

When you begin to **slip** the segment, the Slip & Slide menu appears above the timeline. This allows you to view the incoming and outgoing frames of the segment, frame by frame.



The following keyboard shortcuts can be used for increased accuracy.

<C> Slips the segment +10 frames.

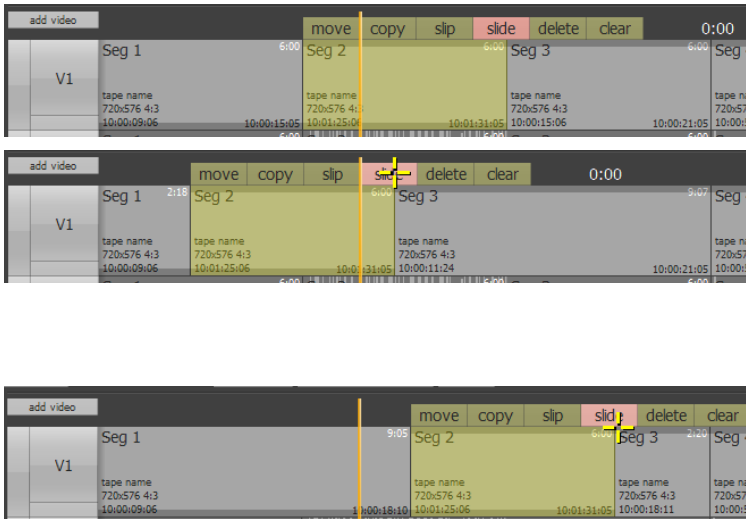
<V> Slips the segment +1 frames.

<B> Slips the segment -1 frame.

<N> Slips the segment -10 frames.

Slide

The **slide** tool allows you to move the selected segment to a new position within the two adjacent segments. The duration of the selected segment remains the same but the duration of the adjacent segments extends or shortens depending on the new position of the selected segment.

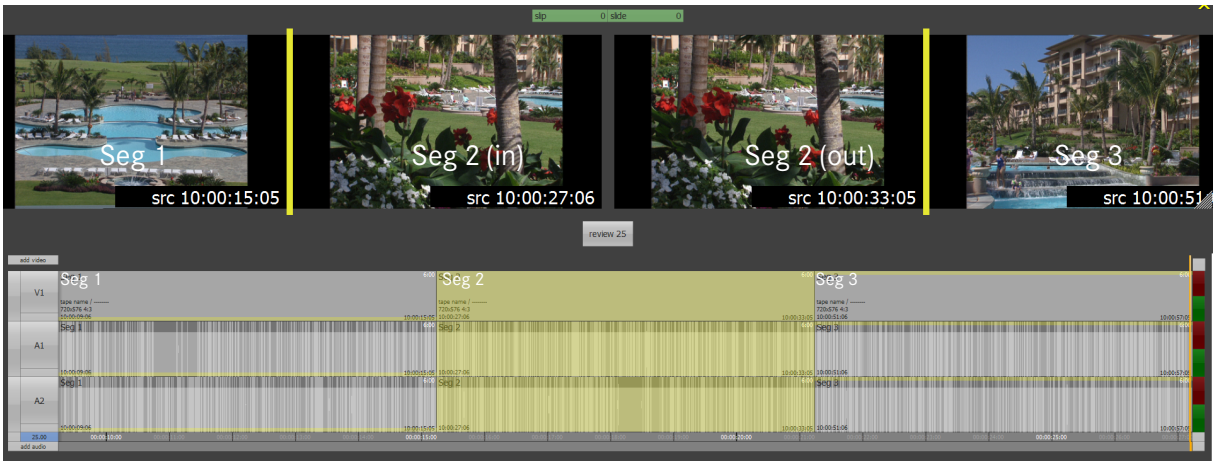


For example, in this screenshot each of the segments are 6 seconds long.

If you select Seg 2 and **slide** it to the left, Seg 2 remains 6 seconds long but its position with relation to Seg 1 and Seg 3 changes. Seg 1 becomes shorter and Seg 3 is extended.

If you **slide** Seg 2 to the right then Seg 1 is extended and Seg 3 is shortened.

When you begin to **slide** the segment the Slip & Slide menu appears above the timeline. This allows you to view the incoming and outgoing frames of the segment, frame by frame.



When the Slip & Slide menu is open, four image tiles are displayed across the top of the interface. The left tile represents the outgoing frame of the segment (eg Seg 1) that precedes the selected segment (Seg 2). The two centre tiles represent the incoming and outgoing frames of the selected segment (Seg 2). The right tile represents the incoming frame of the segment (Seg 3) that follows the selected segment. The two yellow bars either side of the centre tiles represent the in and out edit points of the selected segment (Seg 2).

<C> Slides the segment +10 frames.

<V> Slides the segment +1 frames.

<B> Slides the segment -1 frame.

<N> Slides the segment -10 frames.

copyright © Quantel Ltd 2001-2014

Commit

The **commit** tool allows you to merge each of the selected video segments into a single video segment. Any audio segments included in the selection remain unaffected. The **commit** operation is only displayed if two (or more) adjacent segments are selected on a video track. Any non-contiguous selected segments are left unaffected.

Delete

The **delete** box deletes the currently selected segment(s).

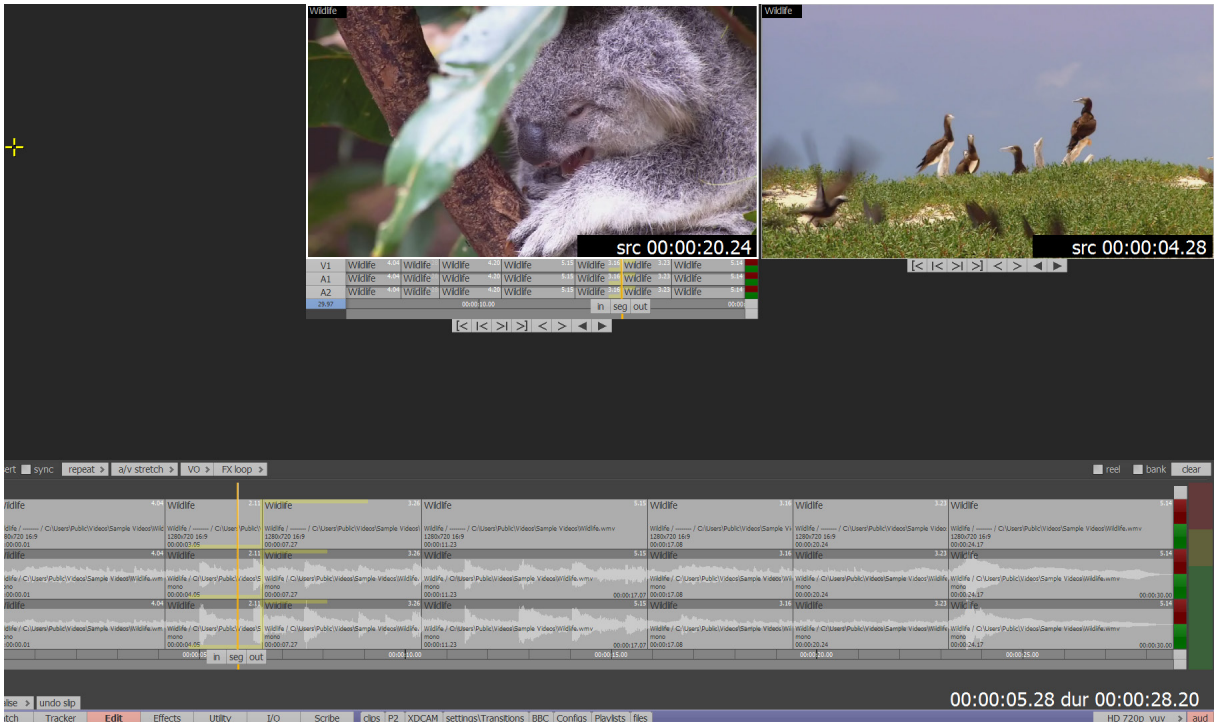
Clear

Clicking **clear** cancels the selection and closes the yellow Move menu.

Editing Styles

Docked Editing

In order to provide a similar display to some third party GUIs, Floating Clips can be docked to the left side of the Edit Window.



To dock a clip place the Floating Clip over the left edge of the Edit Window (which displays a yellow vertical bar) then drop it.

If the clip is taken directly from the Clips Bin and docked to the Edit Window, selecting another clip in the bin switches the display of the docked Floating Clip to the newly selected clip.

In and out points on the docked clip can be marked and then added to the timeline by pressing the <Enter> key.

To release the docked clip, click the video window of the docked clip (avoiding the active area) and drag away.

The Floating Clip must be smaller than the Edit Window in order for it to dock. See the previous screenshot

copyright © Quantel Ltd 2001-2014

Locked Clips

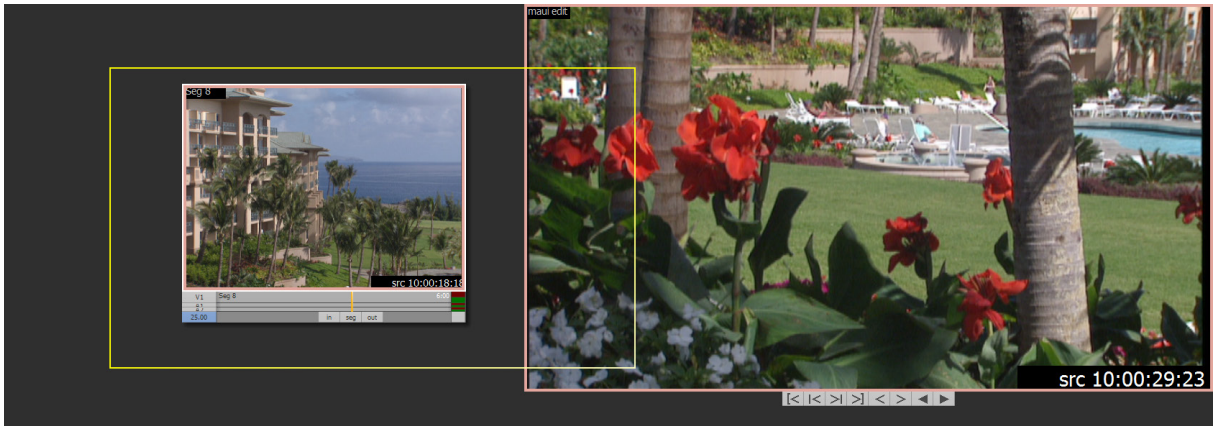
Locking Floating Clips

Floating Clips can be locked together by holding down the <Ctrl> key and selecting them using the cursor (indicated by a pink clip outline). Alternatively, a lasso can be drawn around the Floating Clips on the desktop to lock them together.

With the Floating Clips locked, playing or selecting in/out points on one Floating Clip duplicates the action in all the locked clips.

Locking Floating Clips to the Timeline

The timeline can also be locked together with a Floating Clip(s). To do this draw a lasso around the Floating Clip and the Edit Window.



With the timeline locked to a Floating Clip, playing or selecting in/out points on the Floating Clip also duplicates this action on the timeline clip.

The currently selected clip (highlighted with a white outline) is the 'master' and any other clips in the selection are locked to this master. Change the master to a different clip by pressing <Tab> to toggle through the clips.

Unlock the clips by clicking anywhere on an empty area of the desktop.

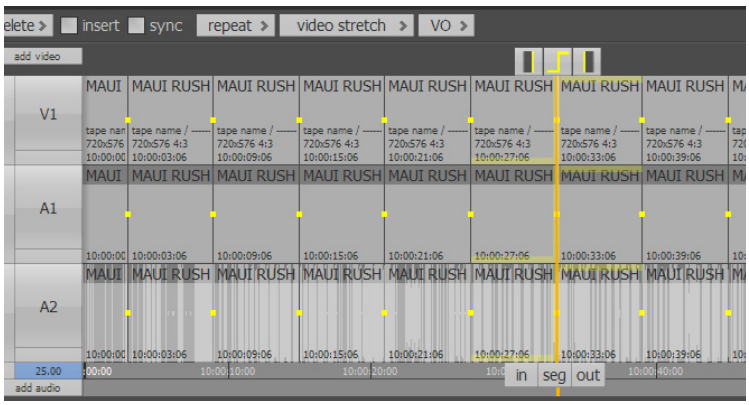
Cursor to Cursor Editing

'Cursor to cursor' editing is a technique that allows you to match the cursor of the timeline clip to the cursor of the clip you want to add.

By default, the cursor on the timeline acts as an in point when editing. Unless otherwise specified, by using **insert** or **sync** for example, any clips added are placed at the current cursor point on the timeline. The same applies to the clip you want to add; the cursor of the new clip acts as the in point and only frames from the cursor point are added to the timeline.

How to use 'Cursor to Cursor' Editing

1. Place the timeline cursor at the correct position on the timeline, ie where you would like the new clip to be placed. If you want the new clip to be inserted at the end of the current edit then place the cursor at the last frame on the timeline.



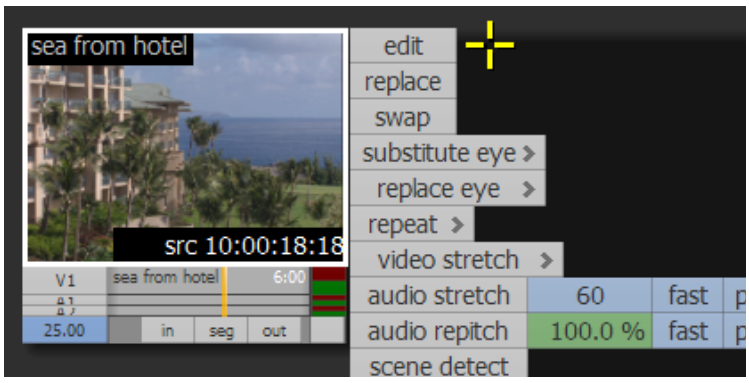
Note that if **insert** is NOT selected, adding a new clip overwrites any existing frames that the new clip overlaps.

2 Locate the clip you want to add to the timeline edit.

3 Place the clip on the desktop as a Floating Clip.

4 Place the Floating Clip cursor at the correct position, ie the first frame of the section you would like to be added to the timeline. If you want to insert the entire clip into the timeline edit then ensure the cursor is placed on the first frame of the Floating Clip.

5 Press <Enter> with the Floating Clip selected to add it to the timeline edit.



Alternatively, access the **more** menu on the Floating Clip by hovering outside the top-right corner of the clip. Click **more** and select **edit.**

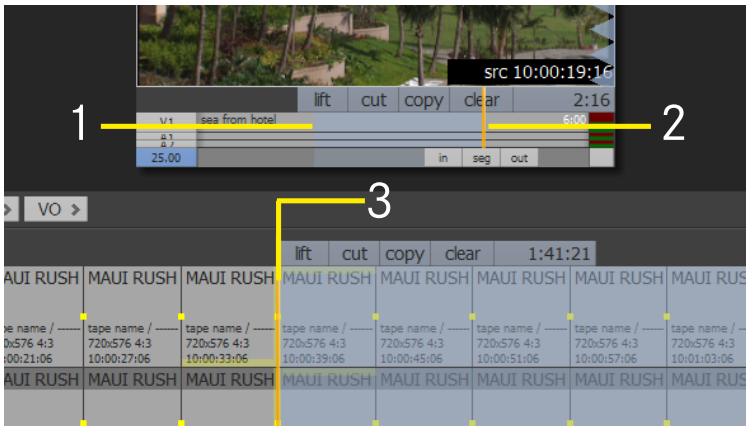
Any material after the Floating Clip cursor position is added to the timeline, at the position of the timeline cursor. Any material before the Floating Clip cursor position is regarded as the in tail.

copyright © Quantel Ltd 2001-2014

3 Point Editing

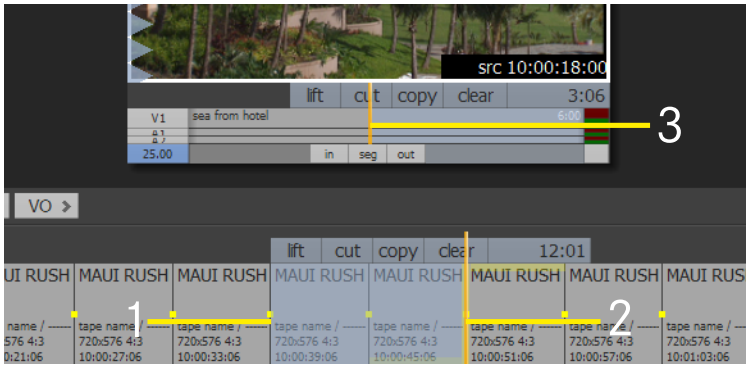
Simple

A 'simple' 3 Point Edit involves setting 3 edit points to mark where and how a new segment is placed on the timeline. These 3 points can be placed by doing one of the following:



- Set an in and an out point on a Floating Clip to specify a section that you want to insert on the timeline. These are the 1st and 2nd edit points. Then mark either the in or out point on the timeline where you want the selected segment to be inserted. This is known as the 3rd edit point. Press <Enter> to add the new clip segment to the timeline.

In this method, the Floating Clip segment (frames between points 1 and 2) is placed on the timeline starting at point 3.



- Set in and out points on the timeline to specify a section that you want to insert into. These are the 1st and 2nd edit points. Then set either an in or out point on the Floating Clip. This is the 3rd edit point. Press <Enter> to add the Floating Clip segment to the timeline.

In this method, the Floating Clip segment, from point 3 onwards, is placed on the timeline between points 1 and 2.

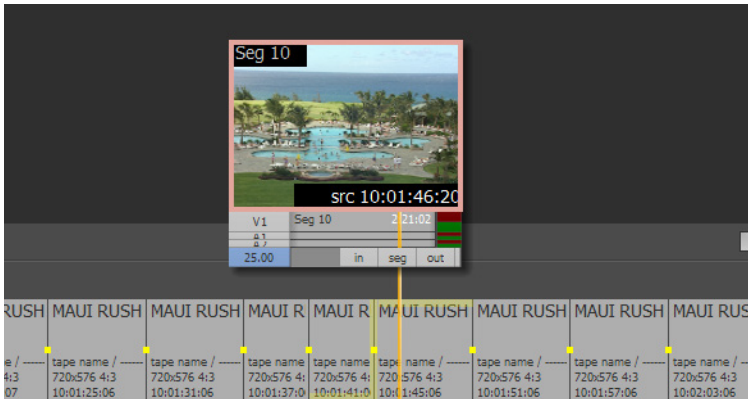
Back Timing

Back Timing is a variation of the 3 Point Editing technique. When using the Back Timing method you insert an out point on the timeline first. When the new clip is added to the timeline, it is back-timed from the timeline out point.

Match Frame

The 'Match Frame' function enables you to access the original rushes from a current frame on the timeline, in a Floating Clip format. The 'Match Frame' Floating Clip can be re-sized and used in exactly the same way as any Floating Clip. Note that Match Frame only works if the source clip is available. To use the Match Frame feature, do the following:

1. Place the timeline cursor on the frame you want to Match Frame.
2. Press either <M> or <F9> on the keyboard.
3. The original clip (rushes) are displayed above the timeline as a Floating Clip if available.



The Floating Clip has a pink outline and is locked to the timeline. Any navigation through the clip on the timeline is matched by the Floating Clip. To unlock the clips, click on an empty part of the desktop.

Match Frame is designed for use with clean clips (ie clips with no history). Therefore Match Frame does not work if the clip has any effects or processing history.

If matchframing to server held material that has been deleted, only the frames stored using frame magic are displayed.

The <Tab> key on the keyboard can be used to swap focus between the timeline clip and the Floating Clip.

copyright © Quantel Ltd 2001-2014

MLT Editing

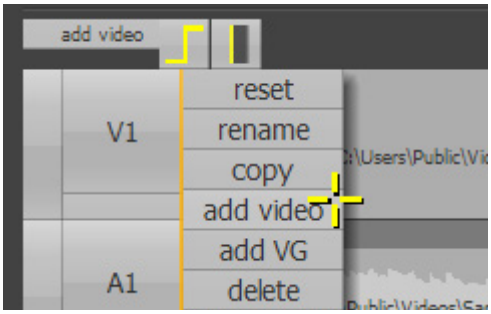
Starting an MLT Edit

Most of the flat timeline functions and workflows are applicable within the multi-layer timeline (MLT). Before assembling clips on the multi-layer timeline, consider the parameters described in “Set Global Parameters” on page 1-20.

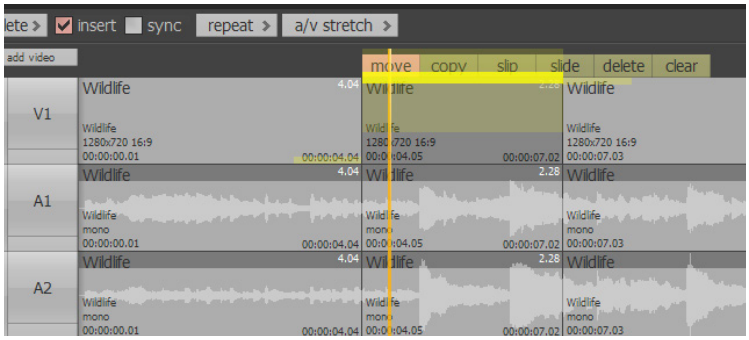
Adding Video Tracks

By default, the Edit timeline has a single video track (named **V1**). On supported workstations additional video tracks can be added to create advanced multi-layer timelines (MLTs). Additional video tracks can be added by doing one of the following:

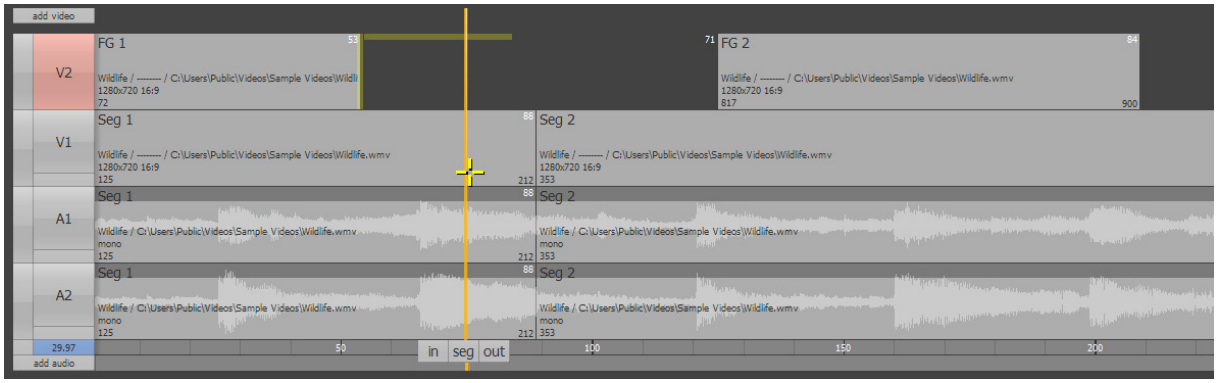
- Click the **add video** box located in the top-left of the menu area.
- Drag a clip directly onto the **add video** box. This method creates a new track and loads the clip’s video at the current cursor position.



- Right-click on the **V1** box and select **add video** from the pop-up.



- Select a video segment using the yellow ‘Move’ menu. Move the video segment up until a thick yellow line appears above the track then let go.



Each new track increments accordingly, indicated in the track filter boxes on the left of the timeline, eg **V2**, **V3**, **V4** etc.

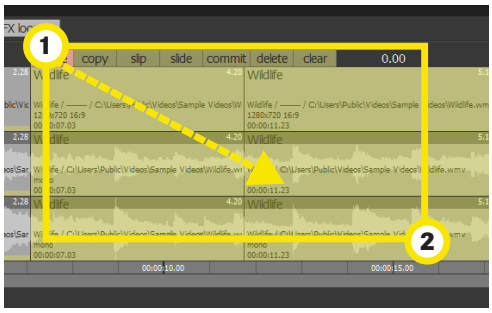
Placing Clips on Specific Tracks

Click a track filter box (eg **V3**) to enable it before adding a new clip in order to ensure the new clip is placed onto this track.

Moving or Copying Between MLT Tracks

To move or copy segments between video tracks, do the following:

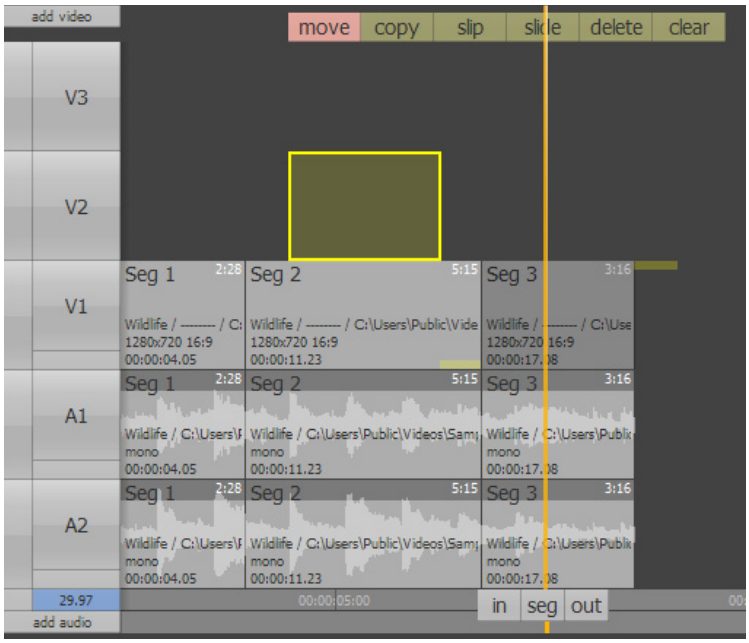
1 Select the video track that you want to move/copy the segment from (eg **V4**).



2 Starting above the timeline, click and drag the cursor from top-left to bottom-right over the required segment(s) to display the yellow 'move' menu.

OR

Press <Shift> and click on multiple segments, or double click on a single segment to display the yellow 'move' menu.



3 From this menu, select **move** or **copy**, then drag the selected segment(s) to the new track and position indicated by the yellow highlight. This 'snaps to' any nearby segment's edit points or the timeline cursor, but it can be placed anywhere. Timeline effects are also moved/copied.

Alternatively, to copy a single segment between tracks, select the track and its segment, then press <Ctrl>+<C>. Select the track and the position for the copy, then press <Ctrl>+<V> to paste the segment at the new cursor position (without any effects or transitions).

See "Move Menu Tools" on page 4-7 for more details about moving segments within tracks.

copyright © Quantel Ltd 2001-2014

Trimming

See “Marking a Section” on page 4-2 for information about using the ‘seg’, ‘in’ and ‘out’ timeline cursor functions.

Topping and Tailing

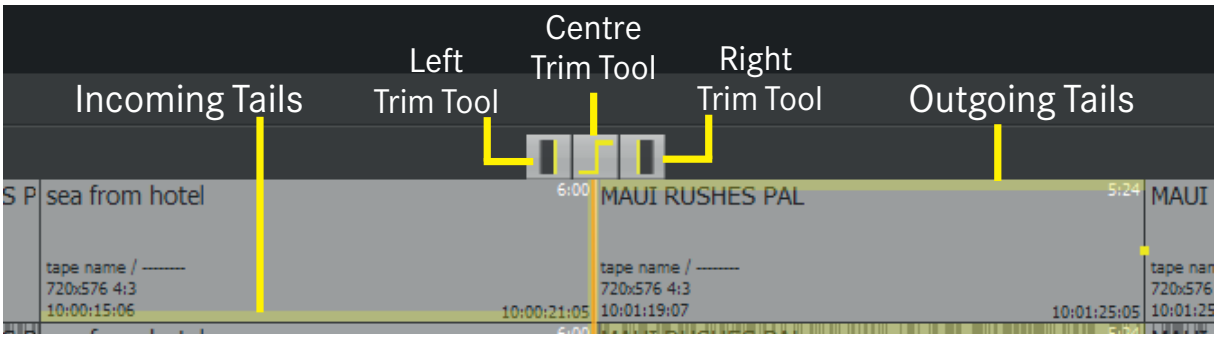
Topping and tailing allows you to remove unwanted frames from the start and finish of a clip segment. To ‘top and tail’ the start and finish of a clip do the following:

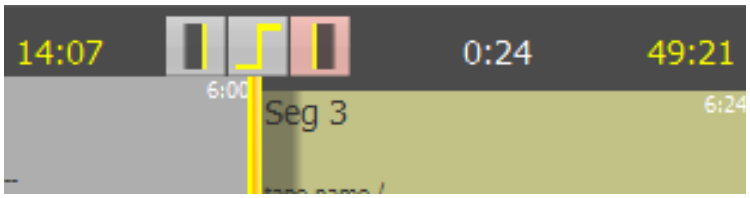
1. Position the cursor at the desired new in point of the clip segment.
2. Press the <[> key to trim the ‘top’ off the clip.
3. Now position the cursor at the desired new out point of the clip segment.
4. Press <]> to trim the ‘tail’ off the clip.

Trim Functions

When the cursor is placed at an edit point, the trim boxes appear as an extension of the cursor. Yellow horizontal bars appear below the previous segment on the timeline and above the next segment (see the screenshot below) if there are associated tails available.

If no specific tracks are selected using the Track Filter Boxes then the trim affects all tracks.



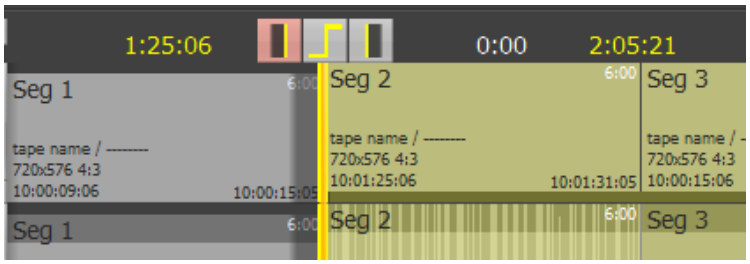


When one of the trim tools is clicked, it highlights pink (see screenshot) indicating it is in use.

Yellow timecodes appear on either side of the trim tools. These specify the number of tail frames available; on the left for the incoming clip, and on the right for the outgoing clip.

A white timecode is also displayed, which indicates the number of frames that have been trimmed. You can click on the white timecode to display a pop-up, allowing you to numerically change the value.

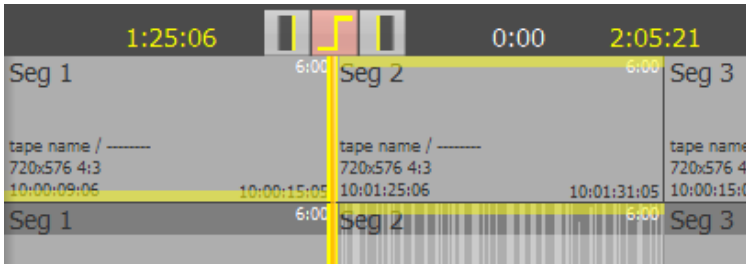
Left Trim



The left trim tool (trim under) allows the out point of the first segment (eg Seg 1) to be adjusted. Dragging the tool left shortens the first segment (Seg 1) by slipping Seg 1 under Seg 2.

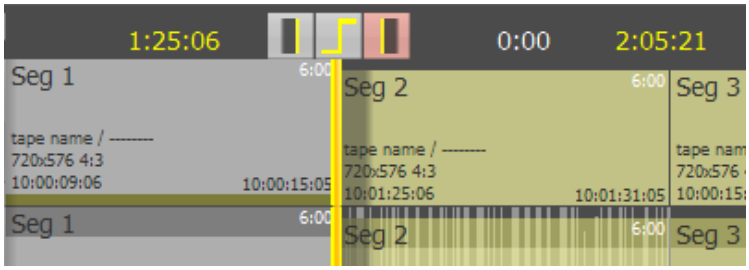
Dragging the tool to the right lengthens the first segment (Seg 1) by moving the next segment (Seg 2) further along the timeline. This exposes unused frames of the first segment's out tail (if tails are available).

Centre Trim



The centre trim tool allows the out point of the first segment (Seg 1) and the in point of the next segment (Seg 2) to be adjusted simultaneously, extending one segment while shortening the other.

Right Trim



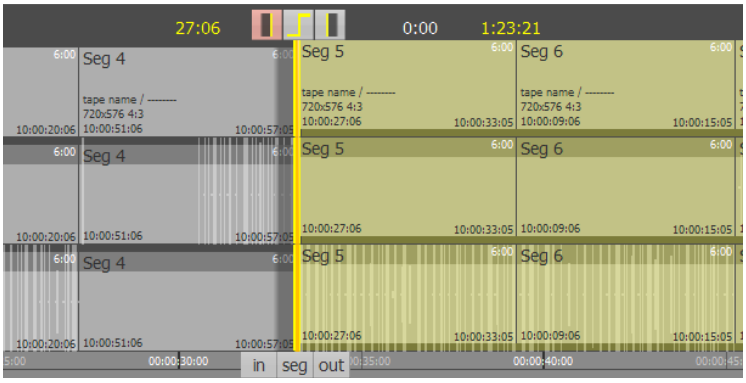
The right trim tool (trim over) allows the in point of the second segment (Seg 2) to be moved. Dragging the tool left shortens the second segment (Seg 2) by slipping it under the previous segment (Seg 1).

Dragging the tool to the right lengthens the second segment (Seg 2) by exposing unused frames of the second segment's (Seg 2) in tail (if tails are available).

Complex Trims

Complex Trims allow you to select which edit points on each track are to be trimmed. To do this, follow the steps below:

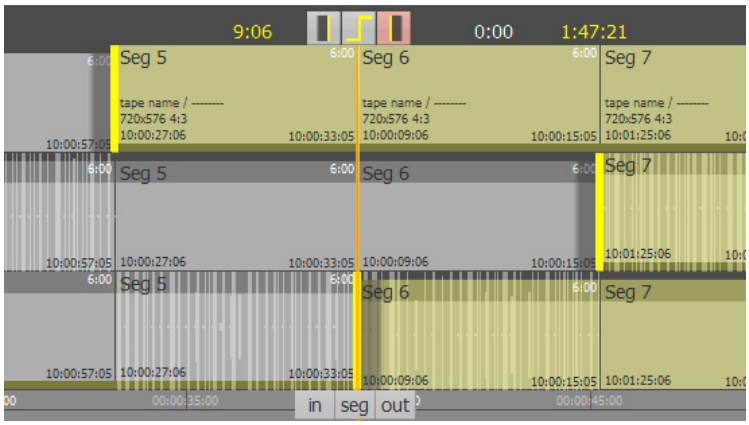
1 Place the timeline cursor on the main edit point (normally the video track) that you want to adjust.



2 Select the required trim tool (see previously section). This selects the nearest edit point (highlighted in yellow) on each of the currently enabled tracks.

copyright © Quantel Ltd 2001-2014

3 To change the selected edit points on each track, hold down the <Shift> key and select the new edit points to be trimmed.



The yellow trim highlights update accordingly to indicate which edit points have been selected.

In this example, the video track is selected from Seg 5. The first audio track is selected from Seg 7. The second audio track is selected from Seg 6.

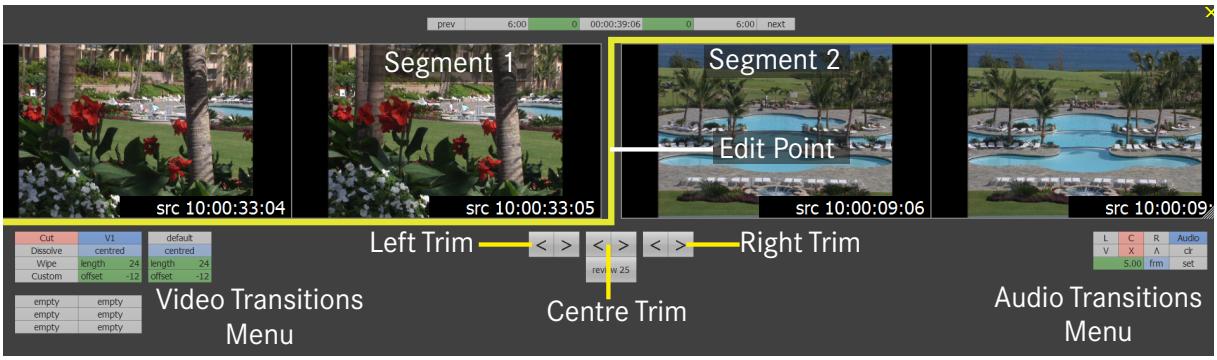
4 If you want to remove any of the edit points from the selection then deselect it by holding <Shift> and clicking on the edit point.

5 When the required edit points have been selected, click and drag the trim box to move each of the selected edit points simultaneously to the required position. This means, although the edit points are in different positions, they are trimmed by exactly the same amount.

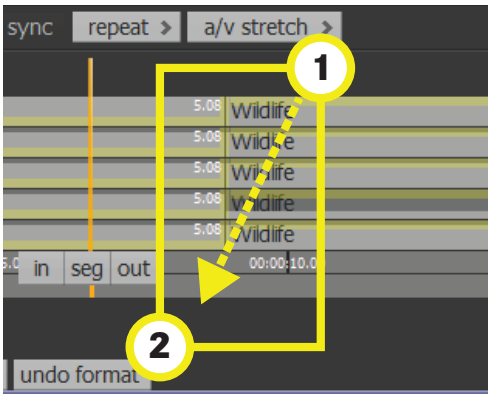
Selecting specific track filter boxes also controls which segments are being trimmed.

Using the Trim/Transitions Window

The Trim Window provides a visual indication of the trim as it is being performed. It consists of a reel display spanning the length of the timeline and includes numerical controls above the reel to enter a trim value. It also contains the full transitions menu which you can use to apply a transition between the two selected segments.



How to Access the Trim/Transition Window



To access the Trim/Transition Window, drag the cursor from top-right to bottom-left over the required edit point.

The window can be closed by hovering in the top right corner and clicking the X. Alternatively, click in an empty area on the interface to close the window.

Opening the Trim/Transitions Window hides the Edit Window and the desktop, including any open bins and Floating Clips.

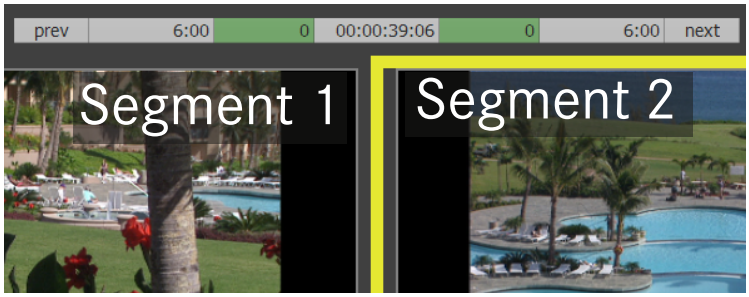
How to Use the Trim/Transitions Window

The reel area displays the last few frames of the outgoing segment on the left and the first few frames of the incoming segment on the right. The horizontal yellow lines below and above the reel indicate the incoming and outgoing tails available (ie the unused frames attached to each segment). If there are no yellow horizontal lines, then the segments do not have any available tails.

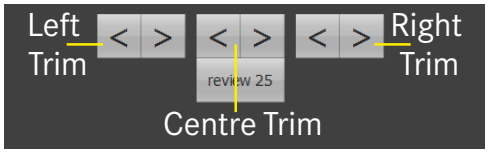
A resize icon is located on the bottom-right of the reel and can be used to increase or decrease the size of the reel thumbnails and therefore the number of frames that are able to be displayed. Click and drag this icon to resize the reel display

To perform a trim within the Trim/Transitions Window click on the edit marker (not the image area) and drag left or right. The edit marker changes colour from yellow to white as you do this.

copyright © Quantel Ltd 2001-2014



The grey numeric boxes directly above the reel show the new timecode position of the edit point. The green boxes show the number of frames that have been trimmed. These boxes can also be used to enter a specific timecode or frame value.



Click on the arrow boxes directly below the edit marker, to move the edit point back or forward by one or ten frames. Alternatively, click any of the following keyboard shortcuts:

<V> Trims the outgoing clip by a single frame

<B> Trims the incoming clip by a single frame

<C> Trims the outgoing clip by 10 frames

<N> Trims the incoming clip by 10 frames

Click the **review** box to play the trimmed edit. Drag **review** left to increase the pre-roll for the review.

The edit point can only be moved if there are tails available.

Split Edits

You can also move the edit point of individual video and audio tracks. This is often referred to as a ‘split edit’.

Use the track filters to select the video or audio track that you want to adjust. Only the tails on the selected track remain yellow (see screenshot).

With a track filter selected the trim tools are applied to the individual track. When you trim with a track filter selected the video and audio are no longer in sync (see screenshot).

Transitions

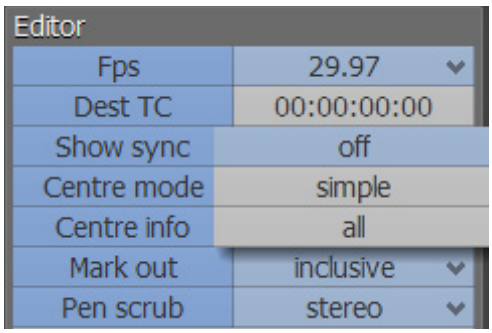
Transitions can be added and adjusted from within the Trim/Transition window. For full details about using the transition menu see “Video Transitions” on page 3-28.

Video/Audio Sync

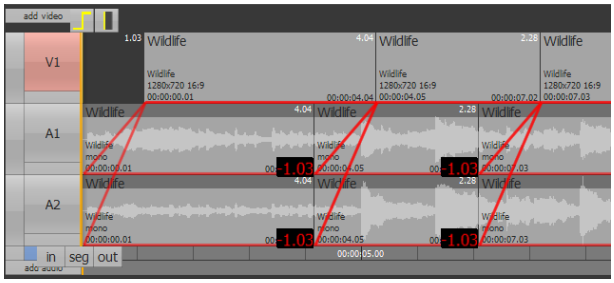
When video and audio from the same original clip are split during editing, the affected audio segments are shown with either a red underscore or a red parallelogram with an audio slip value (see screen shot below). There is no red line where video and audio segments have no real relationship.

'Show Sync' Indication

When audio and video tracks are edited independently of each other (eg when the track filters have been selected) there is a danger of breaking the relationship between them. For example, if frames are added only to the video track, all the following frames move along to make room for the new ones. The audio track however, remains where it is and becomes out of sync with the corresponding video.



The timeline can display the synchronisation of the video and audio segments by displaying sync loss indicators. These indicators can be turned on or off from the <F1> Configuration Window's **Editor** menu by selecting **all** or **simple** from the **Show sync** scroll box. Selecting **all** provides a full display of warnings. Selecting **simple** displays only red lines under the clip segment that has lost video/audio sync.

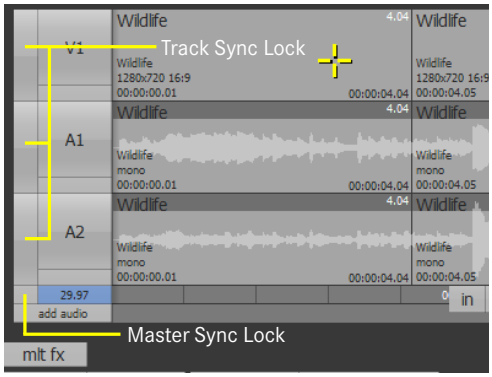


all

simple

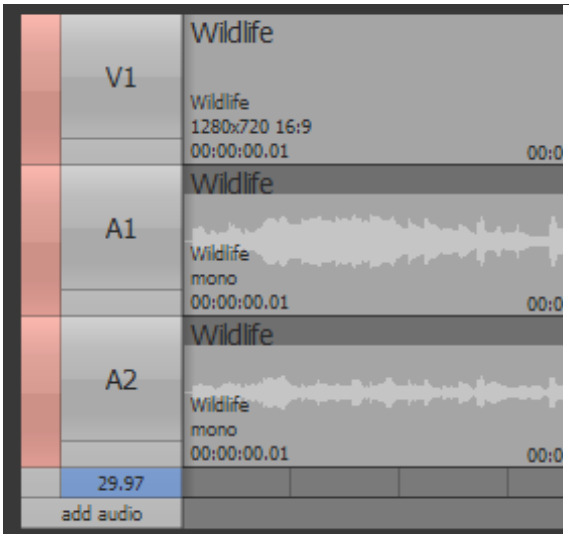
Sync Lock

Typically when the content of recorded video and audio are matched (eg a person talking to camera), sync lock must be maintained at all times. Other material such as audio effects tracks, or commentaries from other sources, may need to be slipped to correspond with events on the edit timeline.

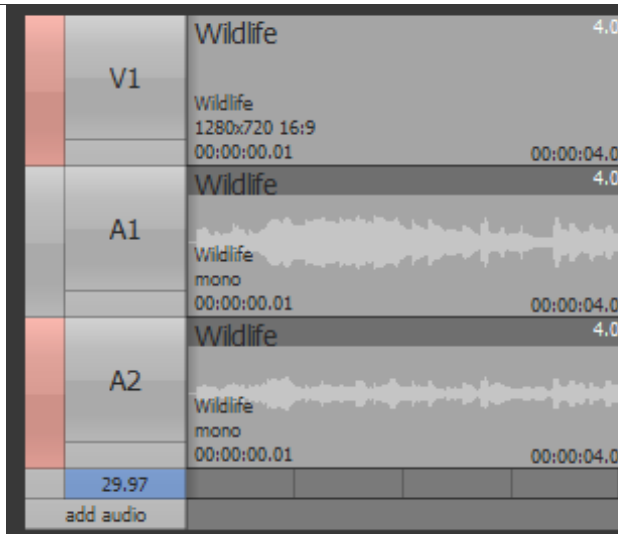


Sync lock can be maintained automatically by enabling the 'master track sync lock' button in the bottom-left corner of the timeline (see following screen shot). The larger buttons to the left of each audio track filter box allow sync lock to be added or removed from specific tracks.

copyright © Quantel Ltd 2001-2014



Master Sync Lock



Track Sync Lock

When the Master Sync Lock box is pressed, all tracks are sync locked. Now when one track is edited, the system automatically forces the audio or video to follow. For example, if a video-only segment is inserted into the video track then the audio tracks that are locked to it have silence inserted to maintain video/audio synchronisation. Likewise if a segment of video is removed then the corresponding audio track segment is also removed.

Alternatively the individual Track Sync Lock boxes can be selected to only lock specific tracks together.

Correcting Broken Sync

When audio/video sync is lost it can be corrected by noting how many frames the track is out of sync by and then sliding the segments correspondingly to regain sync.

copyright © Quantel Ltd 2001-2014

Clip Processing

Rendering

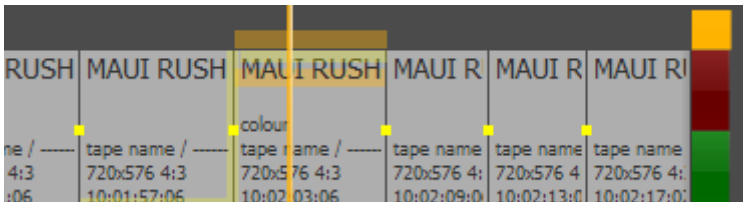
When to Render Clips

When segments are assembled on the timeline, no new video frames are created. The edit plays-back smoothly without stuttering, so it is not necessary to render it beforehand to make it 'playable'. However, if any effects process (eg MLT FX, Effects, transitions, templates etc) are applied to the media, new frames are created and therefore need to be rendered to make the clip playable.

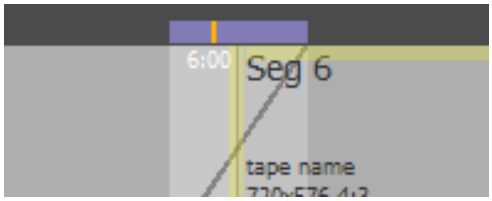
How to Render

When rendering is required on a segment an orange highlight appears above the segment and the render box on the top-right of the timeline (above the red and green solo and mute buttons) turns orange, as shown in the screenshot below.

See "Timeline Clip Segment Information" on page 1-16 for details about segment highlights.



Click the orange render box to render all unrendered segments.



When rendering is in progress the orange highlight above the currently rendering segment becomes a purple progress bar.

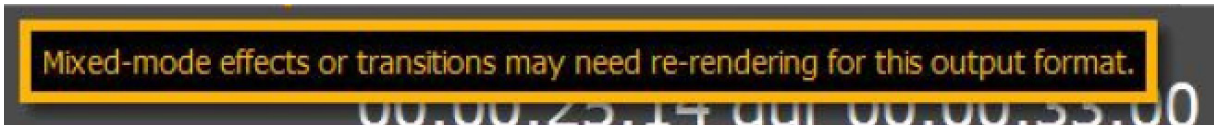
The render box also turns purple to indicate a render is in progress.

Mixed Render Formats

An edit consisting of the same video format is rendered at it's native resolution. When there are mixed resolution clips, transitions or effects processes applied, it is necessary to re-render them to match the current output setting.

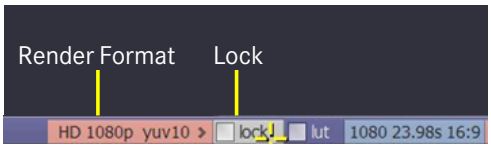
If the render format is not the same as the output format then a red outline is displayed around the orange render box.

If the output mode is changed a warning message is also displayed.



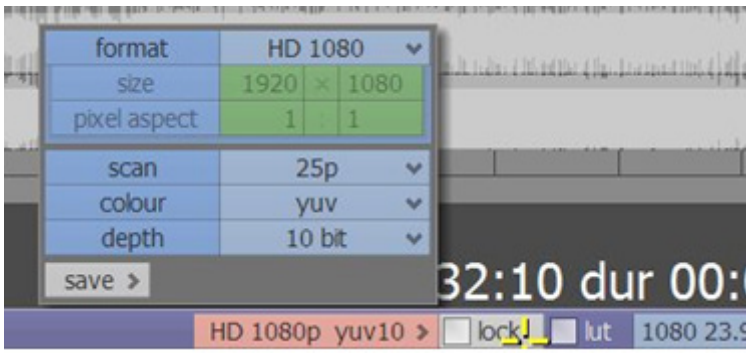
copyright © Quantel Ltd 2001-2014

When there are mixed format clips, the render format should be selected manually to ensure that the edit is rendered in the required format.



This is done via the render format box located on the Application Bar. The render format can be locked to the current video format setting by ticking **lock**.

Parameters in the render format pop-up should be set to match the required video format for the final clip:



1 Click the video render format box on the bottom-right of the Application Bar. This opens a pop-up.

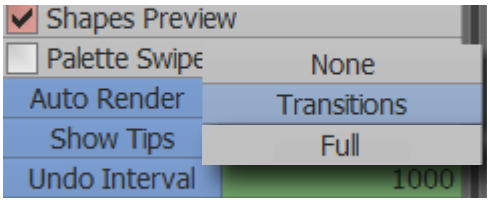
2 Select the required settings. The parameters in the render format pop-up must match the required video format for the final clip.

format	Specifies the video format; eg **SD 576 4:3**, **SD 576 16:9**, **SD 486 4:3**, **SD 486 16:9**, **HD 720**, **HD 1080**, **2K 1556**, **custom**.
size/pixel aspect	Only adjustable if **custom** format is selected from the **format** box.
scan	Specifies either **interlaced** or **progressive**.
colour	Specifies the colour space of the rendered material.
depth	Specifies the bit-depth of the rendered material.

3 Click **save** to store the render format settings.

Auto Render (<F1>)

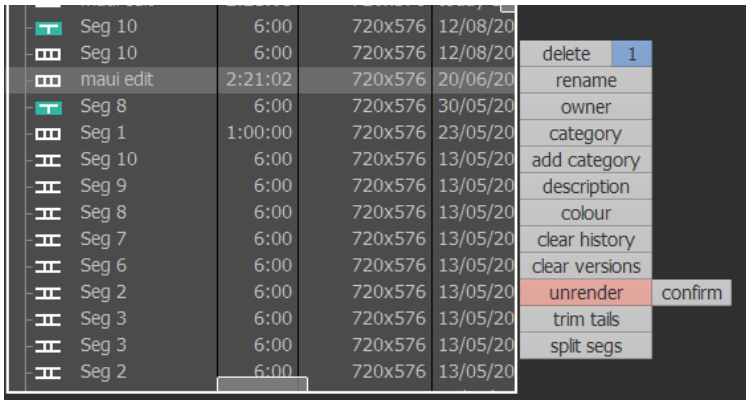
In the <F1> Configuration Window there is an **Auto Render** scrolling menu that allows transitions to be automatically rendered. With **Transitions** selected, any transition applied is rendered automatically. With None selected you must render using the render box on the timeline.



In products that have the render bin available, there is also an option in the **Auto Render** scroll menu called **Full**. With **Full** selected any transition or effect process is automatically rendered.

Unrender

Unrendering an effect can help reduce the size of archives. The original media with only the **Effects/MLT FX** metadata is stored, therefore saving disk space.



It is possible to simultaneously unrender any transitions, **MLT FX** history and **Effects** history from within the Clips Bin. Click on the name of the clip to be unrendered and select **unrender** from the menu that appears. Then select **confirm** to complete the unrender. This unrenders ALL transitions, **Effects** and **MLT FX** history in the clip.

copyright © Quantel Ltd 2001-2014

Soft-Mounting

Soft-mounting allows media to be instantly viewed, edited, and effects can be applied without having to import the media into the Marco workspace. With Marco, media can be soft-mounted from the **Import** menu, **Archive In** menu and **XDCAM** and **P2** Essence Driver Bins.

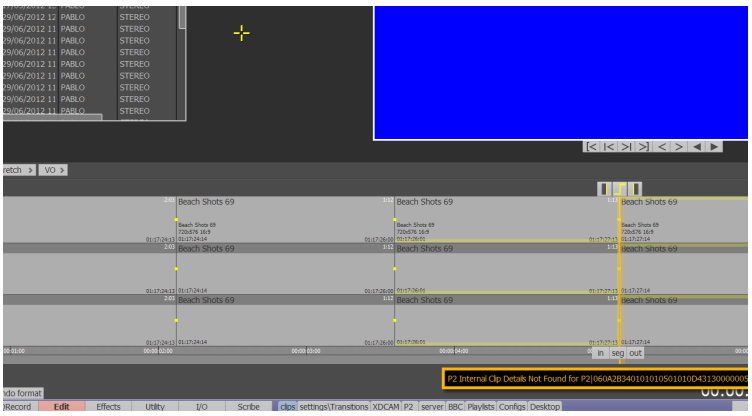
Any soft-mounted media is indicated in the Clips Bin with yellow icons. A yellow bar on the Edit or MLT FX timeline indicates where a segment uses remote media.

Soft-mounted clips are displayed at preview resolution and not the full render/localise resolution.

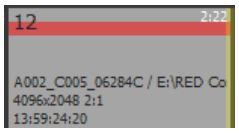
If soft-mounted media is rendered, only the rendered frames are written to the local workspace. If media needs to be re-edited and its history accessed, the original media needs to be available online or the original rushes localised first. Media can be localised from the Clips Bin, Floating Clip or timeline.

See the 'IO Supported Formats Quick Reference Guide' for a full list of soft-mountable formats.

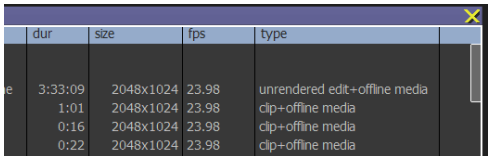
Relinking Soft-Mounted Media



Saving a clip that contains remote material to the Clips Bin does not create a local copy of the material. If the remote material becomes unavailable then the clip, complete with edit decisions, remains in the Clips Bin but the media appears 'offline', indicated by a blue video display in the Edit Window.

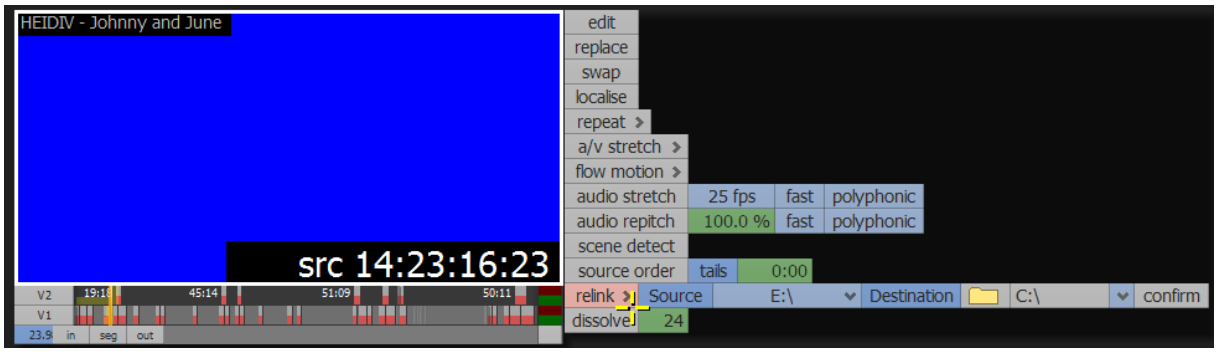


If the original location of the media is either offline or no longer available, there is a red bar indicator on the timeline. This is shown instead of the yellow bar that indicates soft-mount material.



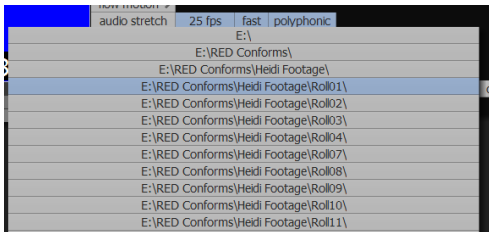
In the clips library, clips containing offline media are indicated in the **type** field with "… **+ offline media**"

A quick way of finding out if any of clips have rushes that point to offline media is by selecting a project folder in the Clips Bin and clicking on **analyse offline**. This checks all of the clips in the project for offline media and updates the type field with "**...+offline media**". There is also a global **Analyse offline** option in the <F1> Configuration Window which does the same action on all the clips in the Clips Bin.



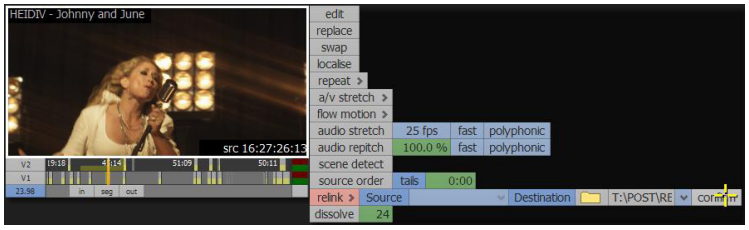
If a soft-mounted clip has been disconnected from its source material the video window becomes blue and the offline segments are indicated by a red bar across the top of each segment. If the source material becomes available again then the system automatically relinks the clip with the source material. However if the source material is reconnected using a different path then the material must be manually relinked to a path of the user's choice.

On a Floating Clip, soft-mounted media can be relinked by accessing the More menu by hovering outside the top right corner of the Floating Clip and clicking on **menu**. From the More menu, select **relink**. The **relink** menu expands, providing options to select the original source and enter/select the new destination path.



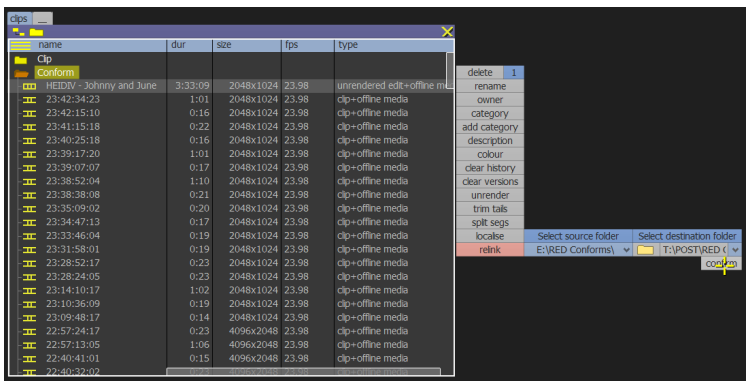
Clicking on the **Source** scroll box displays a list of all the folders that the rushes point to.

Once the source path is selected, use the Destination text box to enter the new destination. Alternatively click on the folder icon to manually navigate to the new destination folder.



When the source path and new destination have been selected, click **confirm**.

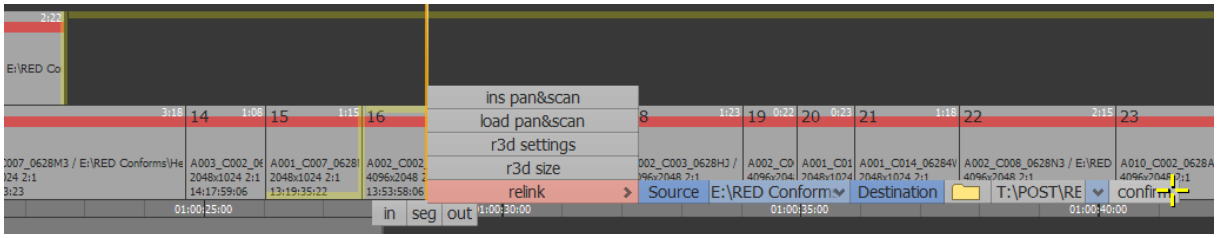
The paths of all the rushes in all the selected clips are checked, and if they have the original path in their file path, it is replaced with the new path. After the media has been relinked, the source list is updated with the remaining list of folders which may still be offline.



The same process can be done from within the Clips Bin.

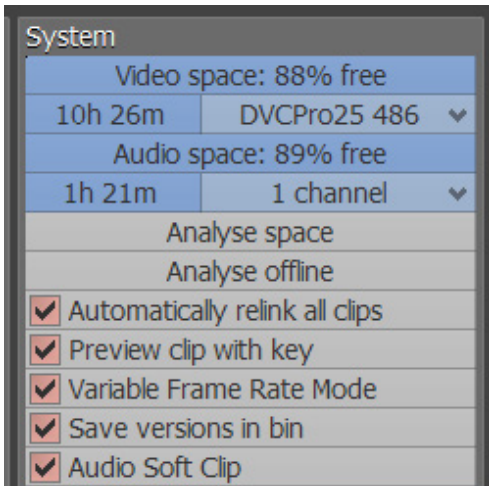
Select the clip by clicking on the clip's title, then select **relink** from the menu that appears.

copyright © Quantel Ltd 2001-2014



Alternatively, the media can be relinked from the timeline. Place the offline media on the timeline and then right-click on any of the offline video segments. Select relink from the menu that appears.

Once this is done and all the media has been properly relinked, the red bar across the offline segments is replaced by the yellow soft mount bar.



There is also an option within the <F1> Configuration Window to automatically relink all clips. If this option is selected, when a relink takes place using any of the previously mentioned methods, all offline clips existing anywhere in the system are relinked. However, this can be a time-consuming process, especially for large databases. As a result this option is deselected by default.

Localise

Why Localise Clips?

Localising a clip ensures that a HBR copy of the clip is saved to the local Quantel workstation. Localised clips can serve as a back up version in case the original source material is accidentally deleted or disconnected.

What Happens

The **localise** function imports a copy of a remotely held clip segment in its native video format and saves it into the Clips Bin.

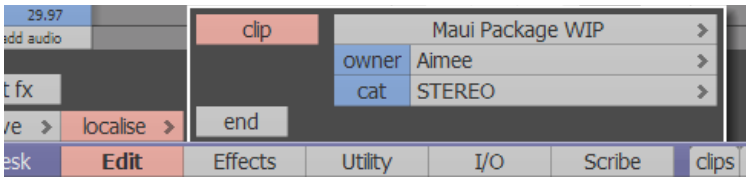
Localised clips are displayed with white bin icons.

Setting Tail Frames

In the <F1> Configuration Window's **Localise** menu, the amount of tail frames to localise can be specified by entering a tail length value in the green **Tail frames** box before localising material. Localising a clip with tails ensures that a set number of additional frames are localised with the clip. Having tails allows the duration of the clip or individual clip segments to be extended. Tails are required in order to add any transitions to a clip.

How to Localise

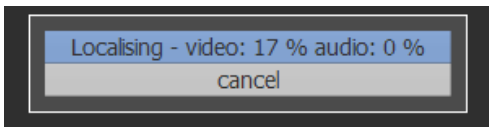
A whole clip can be localised or a selection of the clip can be localised. To localise a section of a clip mark in and out points before selecting **localise**. To localise, do the following:



1 Click the **localise** box at the bottom-left of the timeline area.

2 A pop-up is displayed allowing the name, owner and category to be entered for the current timeline edit. Enter the relevant details.

3 Click the **end** box to begin the localise.



4 A progress indicator (displayed as a percentage) appears during the localisation process. Click **cancel** at any point to stop the process.

5 The localised version of the clip is saved to the Clips Bin. The material is no longer linked to its source.

See the 'sQ & ISA User Guide' for more details about managing video and audio essence on the sQ Server.

copyright © Quantel Ltd 2001-2014

Publishing Clips

Why Publish Clips?

When new frames are created on an sQ Server connected workstation (by local ingest or rendering), they are not automatically available to other server users. To make new media available to all server users, it must be 'published' back to the server.

Any person with access to the server is able to view and use server held material.

Server held clips are displayed with yellow bin icons.

What Happens

When a clip is published, a set of instructions is sent back to the sQ Server and the edit is conformed for play-out using the original HBR server held material.

When a clip is published back to the server, instead of the whole clip being published, only new frames that don't currently exist on the server are transferred, eg new material ingested or rendered frames. This is called Delta Editing and the new frames are referred to as Delta Frames. The server recognises which frames already exist on it and only the Delta Frames are transferred, which helps reduces network traffic and increases the speed of publishing. An audio mix down is performed as part of the publish process, ensuring that audio is processed in a playable format.

If the same clip is published more than once (ie with the same details in the filecard) separate clips appear in the Server Bin. The **name**, **owner** and **category** fields can be identical but the file ID for each publish is always unique.

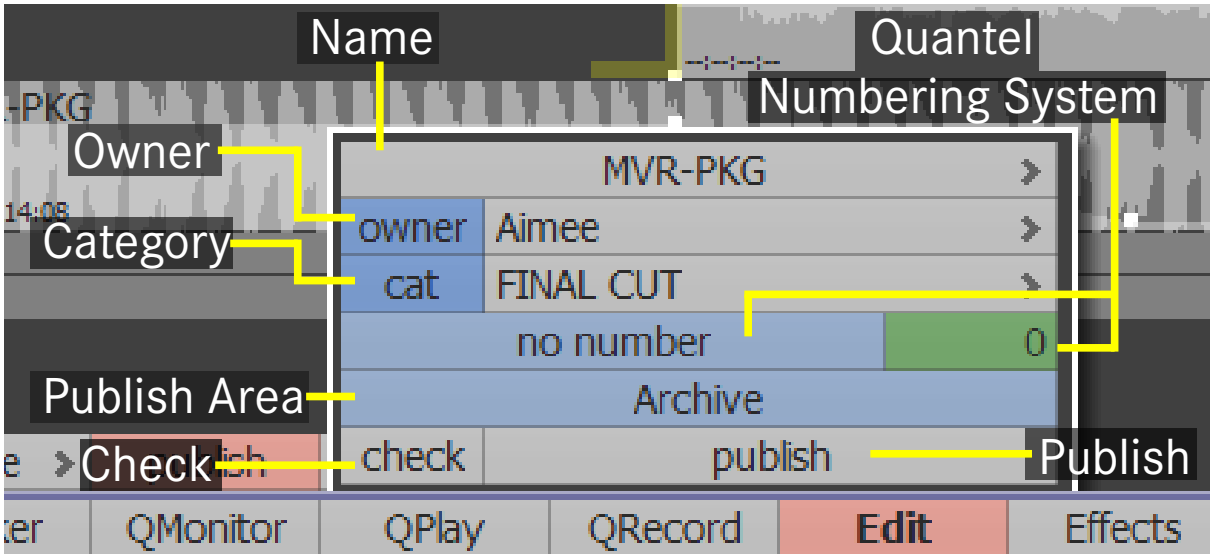
Publishing marks the frames used in an edit as 'in use' which prevents them being deleted even if the original recording/ingest is deleted. The frames are only deleted when all published edits that are using the frames are deleted.

Prerequisites

The clip must be rendered BEFORE publishing; if a publish is attempted on an unrendered clip, a reminder appears and publish can not proceed. The clip must have the same frame rate, resolution and colour space as the server settings in order for the publish to be successful.

How to Publish

To publish a clip, do the following:



1. Click the publish box located to the bottom left of the timeline area. The publish pop-up is displayed (see screenshot).

2. Click on the name box at the top of the pop-up and enter a clip name. Use either the soft keyboard that appears or an external keyboard.

3. Enter an owner and/or category in the **owner** and **cat** boxes. These values are often used for media management/automation systems.

4. Quantel also has its own numbering system that can be used if required for playout. There are three options available in the blue number scroll box. The **first free from** option allocates the first unused number after the number entered in the green numeric box. The **no number** selection disables clip numbering. The **force number** selection forces the publish process to use the number entered in the green numeric box. If that number is already in use by a previously published clip then it is reassigned to the new publish. This number can also be used for media management/automation systems.

5. The **Publish Area** scroll box is different in every system and displays all the available server storage pools (Areas) as specified by the ISA Manager configuration. Select the Area to publish to using this scroll box. Each Area can have its own default owner and category settings (also set by the ISA Manager) that are applied automatically as the default for the published clips.

6. If the HBR server clip has been deleted from the server, the publish fails. To confirm that the HBR clip is still available on the server, click **check** before publishing.

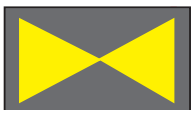
7. Click **publish** to save the clip onto the sQ Server. There is an option to select **Publish and save** in the <F1> Configuration Window's **Server** menu, to simultaneously publish a clip to the server and save it to the Clips Bin.

8. To close the pop-up without publishing, select the X in the top-right corner.

copyright © Quantel Ltd 2001-2014

How to Publish to a Placeholder

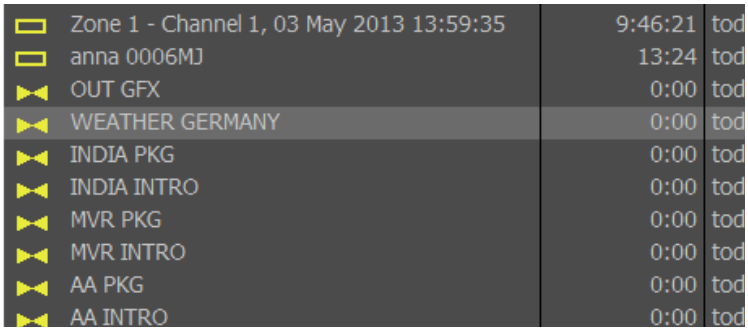
Placeholders are often used in server systems to integrate newsroom control systems and the server. Placeholders are an early reservation for a standard ISA clip. They have an ID and may have clip properties assigned but they do not have any media associated with them. When a clip is ready, it can be published to the placeholder. Many customers with newsroom systems use this system to transfer metadata to a clip leaving an editor to add video/audio content.



The placeholder icon appears in the Server Bin as shown on the left.

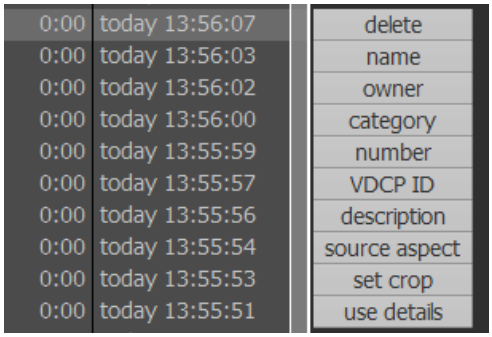
To publish an edit to a placeholder, do the following:

1 Open the Server Bin.



2 Locate the desired placeholder clip.

3 Click on the placeholder clip name. A menu appears to the right of the Server Bin.



4 Select **use details**.

5 The **publish** box below the timeline highlights blue indicating that the placeholder details have been attached to the publish. Select the blue **publish** box to display the publish pop-up. Additional metadata may be entered here.

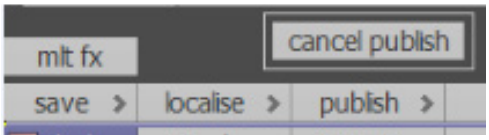
6 Click **publish**.

A placeholder, once filled, has a an edit icon in the Server Bin. A placeholder can only be used once.

A default owner, category and title can be set in the 'Clips' menu in the <F1> Configuration Window (when enabled in the Registry).

See the 'sQ & ISA User Guide' for more details about managing video and audio essence on the sQ Server.

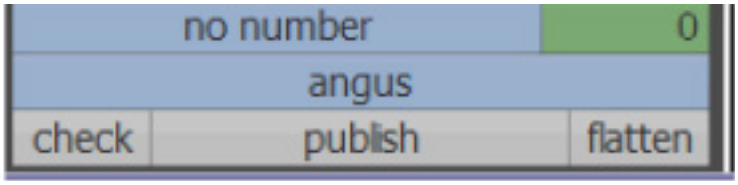
Cancel Publish



Once a publish has started, a **cancel publish** option appears above the **publish** box. Click the **cancel publish** box to cancel the process before it has completed.

Cancelling the publish removes any delta frames from the server that have already been moved as part of the publish process.

Flatten Publish

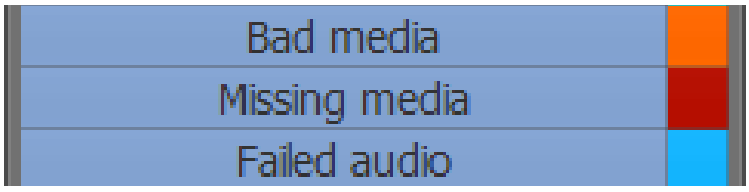


In the software settings there is an option to enable flatten as part of the publishing process. If enabled, a **flatten** box appears in the **publish** pop-up.

Flatten collapses multiple video layers to a single video layer and removes any effects history so that only the rendered result with edit marks is saved on the server.

Publish validate (Check)

The **check** box within the publish pop-up inspects the entire timeline for any issues that could prevent the clip from publishing successfully . When the clip validation has completed the publish pop-up can be closed. If the clip has any failures, the relevant highlights appear on the timeline when the pop-up is closed.



A reminder of the colours and their meanings can be obtained by right clicking on the segment which reveals the following:

Bad Media

This highlight identifies segments that contain media that cannot be published to the server due to incompatible formats. By default, this is highlighted using a deep orange border.

Missing Media

This highlight identifies any segments that contain media that was originally taken from the server but the original server clip has since been deleted. In this circumstance the relevant segments highlight with a deep red border.

Failed Audio

This highlight identifies segments that contain audio that could not be published. Failed audio is highlighted using a light blue border.

The highlight colours for the three issues are configurable through the F1 configuration page. The highlights are only visible on the Edit timeline if "Highlight changes" is enabled.

copyright © Quantel Ltd 2001-2014

Save

The timeline contents can be saved to the local Clips Bin by clicking the **save** box at the bottom-left of the timeline.

Saved clips that contain remote media are displayed with yellow bin icons.

How to Save

1. Click the **save** box at the bottom left of the timeline area.
2. A pop-up is displayed allowing the name, owner and category to be entered for the current timeline edit. Enter the relevant details.
3. Click the **end** box to confirm the save.

With each subsequent save, the title's numeric suffix increments.

Click on the 'save' box and then drag to the desktop to copy the timeline clip to the desktop as a Floating Clip.

copyright © Quantel Ltd 2001-2014

Appendix

About This Manual

This guide covers software available on some Quantel stand-alone and server-connected systems. It may cover functions or options not available on the system you are using.

This guide was written and published by Quantel. The bottom of each page displays the guide's reference number, eg **2140-57-xxx** plus a revision letter, eg **B** (B being more recent than A which is the original). The publish date is also indicated in the format **mm/yy**. If you require hard copies of this guide, always quote the reference number, revision letter and title.

2140-57-020 revision	**publish date**	*ECO (Quantel use only)*	**software version**
A	Oct 2013	E44947	5.3
B	**August 2014**	**E45365**	**5.3**

copyright © Quantel Ltd 2001-2014

Notices

Maintenance

WARNING (WM2) SERVICE PERSONNEL – MAINTENANCE AND CALIBRATION WITHIN THE EQUIPMENT ENCLOSURE IS ONLY TO BE CARRIED OUT BY SERVICE PERSONNEL (12/97)

Conventions Used

Symbols

See: Reference to other items in this document or in other documents.

Notes: System, software and workflow points to consider and remember.

Tips: Useful hints and advice when undertaking tasks.

Information: Additional hardware or software information which may be useful.

Cautions: Indicate possible damage to (or misalignment of) the equipment if the indicated statements are ignored or the indicated procedures are not followed correctly.

WARNINGS: INDICATE DANGER TO LIFE AND LIMB IF THE INDICATED STATEMENTS ARE IGNORED, OR THE INDICATED PROCEDURES ARE NOT FOLLOWED CORRECTLY.

Text

<Text> indicates a specific key press on the QWERTY keyboard.

NN/nn indicates a value entered on a numeric keypad.

Text/text indicates either a Quantel application menu function or a Windows/Quantel installation/system setting.

Trademarks

Most of the product names mentioned in this manual are manufacturer trademarks and are used within this manual only for the purpose of identification:

Quantel sQ Edit, sQ Cut, sQ View, Quantel sQ Edit Plus Platform, Quantel ISA, Quantel Pablo, Quantel PabloNeo, Quantel NeoNano, Quantel iQ, Quantel eQ, iQ Platform, eQ Platform, Resolution Co-existence and Clipnet are trademarks of Quantel Limited.

XDCAM is a registered trademark of Sony Japan.

Final Cut, Final Cut Pro, QuickTime and Macintosh are registered trademarks of Apple Computer, Incorporated.

Windows and Windows Media Player are registered trademarks of the Microsoft Corporation.

Mocha Tracker is a registered trademark of Imagineer Systems Limited.

All other brand names, product names, or trademarks belong to their respective holders.

GNU GPL/LGPL Applied Software: The software contains elements that are licensed under GNU General Public License (GPL) or GNU Lesser General Public License (LGPL).

This informs you that you have a right to have access to, modify and redistribute source code for these software programs under the conditions of the supplied GPL/LGPL. Source code is available on request; you can contact Quantel Support regarding the source code contents.

MPEG-2 Option Notice: As a condition of the MPEG-2 Intermediate Product license granted to Quantel the following notice must be given to the end-user of this product:

USE OF THIS PRODUCT IN ANY MANNER THAT COMPLIES WITH THE MPEG-2 STANDARD IS EXPRESSLY PROHIBITED WITHOUT A LICENSE UNDER APPLICABLE PATENTS IN THE MPEG-2 PATENT PORTFOLIO, WHICH LICENSE IS AVAILABLE FROM MPEG LA, L.L.C., 250 STEELE STREET, SUITE 300, DENVER, COLORADO 80206.

XDCAM Software License Notice: As a condition of the License Agreement that Quantel has with Sony, the following notice must be given to the end-user of this product.

i The END USERS may not modify, change, alter, reverse-engineer, disassemble, decompile or otherwise analyse all or any portion of the LICENSED SOFTWARE except as permitted by applicable law;

ii Any or all warranties associated with the LICENSED SOFTWARE shall be no greater than those contained in the Agreement; and

iii The limited liability of SONY shall be no less than the limited liability under this Agreement.

XDCAM MPEG 4 Option Notice: The Software includes MPEG 4 visual decoding technology. For this technology, MPEG LA, L.L.C. requires this notice:

THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (I) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD ('MPEG-4 VIDEO') AND/OR (II) DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG-4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL, INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE HTTP: //WWW.MPEGLA.COM.

copyright © Quantel Ltd 2001-2014

Disclaimer

Quantel Limited accepts no responsibility for the accuracy of the information contained herein and reserves the right to change the contents without prior notice. This document does not form part of the product's Technical or Functional Specification and does not form part of any contractual agreement.

This manual is not product specific and may detail features that are not available on all systems.

Helpdesk & Web Support

24 Hour Helpdesk

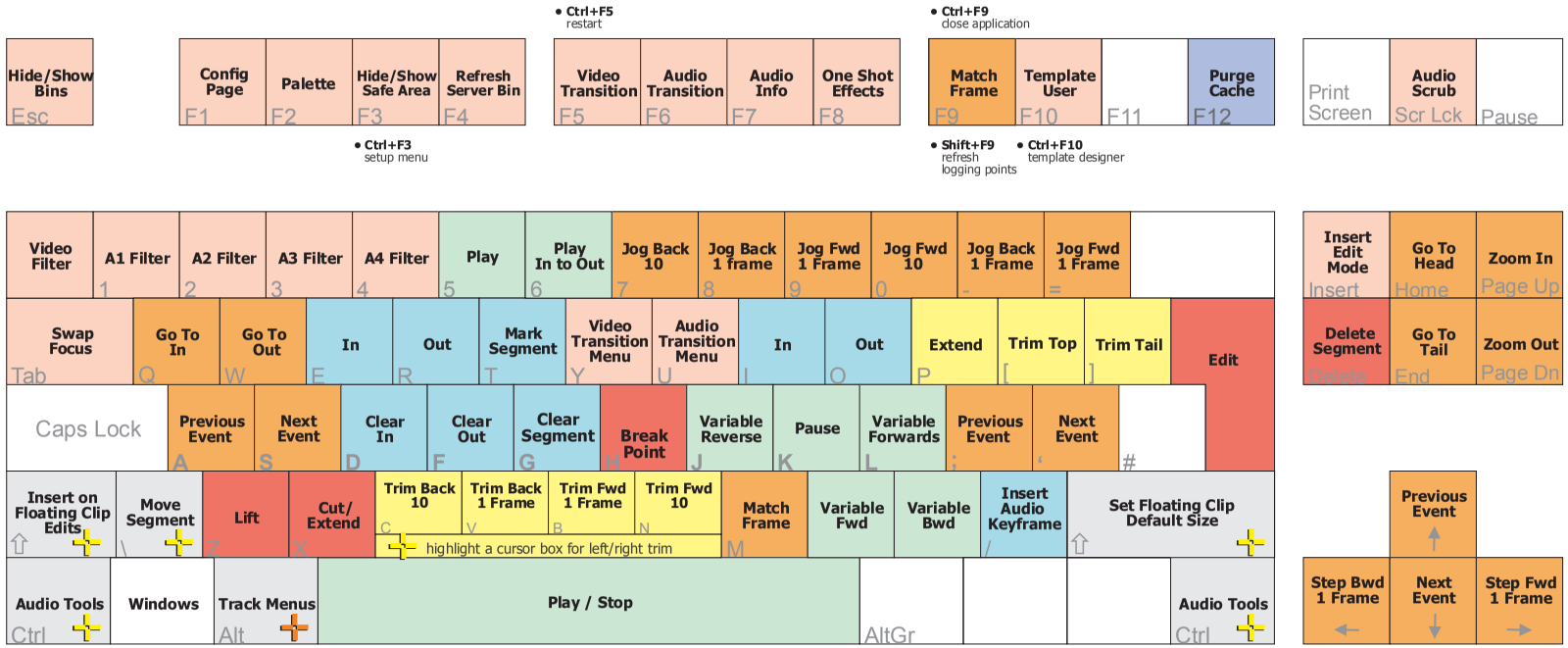
tel +44 (0)1635 38508* **fax** +44 (0)1635 815892
email support@quantel.com

Website & Downloads (manuals, drivers, plugins & software)

http://www.quantel.com go to support–downloads (login required)

* calls may be recorded for training & quality control purposes.

Editing keyboard map



- **Ctrl+Z** undo
- **Ctrl+R** redo
- **Ctrl+A** toggle track filters
- **Ctrl+P** publish
- **Ctrl+Shift+Home** default layout
- **Ctrl+Shift+T** Server Bin clip name pop-up
- **Ctrl+Shift+S** select Server Bin 'areas' box
- **Ctrl+Shift+B** focus on Server Bin
- **Ctrl+Shift+F** focus on Edit timeline
- **Ctrl+Return** show Server Bin clip docked to Edit Window
- **Ctrl+Shift+Return** show Server Bin clip docked to Edit Window with history

- **Windows+D** Windows desktop
- **Shift+** ↓ or ↑ adjust audio level on segment
- **Ctrl+Shift+** ↓ or ↑ adjust audio level on all segments in track
- **Ctrl+** ↓ or ↑ move Server Bin clip selector
- **Alt+** ← or → bwd/fwd bin focus in nested bins
- **Ctrl+** ← or → bwd/fwd1 second
- **Shift+** ← or → bwd/fwd 10 frames
- **Ctrl+Shift+** ← or → bwd/fwd 10 frames

- **Alt+Tab** scroll through Windows applications
- **Alt+S** save clip (or segment) in the Clips Bin
- **Alt+Return** single/double clear timeline
- **Alt+Insert** solo top-most selected video and audio track
- **Alt+V** show/hide voice over controls
- **Alt+B** start/stop voice over recording

To access a function showing this cursor icon, hold the key down and then tap with the pen or left-click with **the mouse**

To access a function showing this cursor icon, hold the key down and then tap with the pen or right-click with **the mouse**

• More button functions

copyright © Quantel Ltd 2001-2014

Configuration Window

Keyboard Shortcut	Function
<F1>	Opens/closes the Configuration Window.

Layout

Keyboard Shortcut	Function
<F3>	Displays/hides the default safe area in the Edit Window.
<Ctrl>+<⇧>+<Home>	Switches to 'default layout', which forces the following actions: Launch Edit application; clear timeline; close MLT FX; delete all Floating Clips; remove copies of Server Bin (but not original); dock Server Bin with Clips Bin; focus on Server Bin; move bins to top-left of desktop and resize to 35% of screen width; change bin view to 'title' (ie not 'browse'); clear clips docked to Edit Window. **NOTE: THIS ACTION CAN NOT BE UNDONE. ENSURE ANY WORK IS SAVED BEFORE USING THIS SHORTCUT.**

Editing

Keyboard Shortcut	Function
<Tab>	Toggles focus between the timeline and the Floating Clip.
<Ctrl>+<⇧>+<F>	Switches focus to timeline.
<Alt>+<Return>	Performs single clear of timeline: press twice to double clear the timeline (ie resets timeline horizontal/vertical scale, number of tracks, and default frame rate as set in the <F1> Configuration Window's **Fps** drop-down).
< ` >	Toggles the video track filter (**V1**) on/off on the timeline or Floating Clip, depending on current focus.*
<Ctrl>+<A>	Toggles the video and audio track filters on/off on the timeline or Floating Clip, depending on current focus.*
< \ >	Displays the yellow 'Move' menu.*
<Return>	If a Floating Clip or a Clips Bin clip is selected, pressing this key (press twice for Clips Bin clip) places the clip on the timeline at the current timeline cursor position overwriting any overlapping media. If **insert** is ticked (or the <Insert> key pressed), the existing media is split and moves along the timeline accordingly (referred to as 'insert edit'). If **sync** is ticked, a Floating Clip can be placed onto the timeline with its cursor point matching the cursor point on the timeline clip.
<Ctrl>+<Return>	Performs an 'insert edit' regardless of whether the **insert** function is enabled or disabled (see previous <Return> shortcut).
<Insert>	Toggles the GUI **insert** function (ie 'insert edit') on/off.*

Keyboard Shortcut	Function
<Alt>+<Y>	Toggles the GUI **sync** function on/off.*
<H>	Inserts a edit point at the current timeline cursor position.
<M>	Selects Match Frame mode.*
<Q>	Jumps to the currently selected in point.
<W>	Jumps to the currently selected out point.
<E>, <I>	Marks an in point at the current timeline cursor position.
<R>, <O>	Marks an out point at the current timeline cursor position.
<T>	Marks the current segment selected by the current timeline cursor position.
<D>	Clears the currently assigned in point.
<F>	Clears the currently assigned out point.
<G>	Clears the currently selected segment.
<Z>	Allows the current segment on the timeline to be lifted.* (in MLT FX this toggles zoom levels).
<P>	Extends the end of a clip segment from its current position to the current timeline cursor position.*
<C>	Placing the timeline cursor on an edit point then pressing this key trims back 10 frames from this edit point. If the timeline cursor is placed elsewhere, pressing this key moves the edit point to the current timeline cursor position and trims from there.
<V>	Placing the timeline cursor on an edit point then pressing this key trims back 1 frame from this edit point. If the timeline cursor is placed elsewhere, pressing this key moves the edit point to the current timeline cursor position and trims from there.
<B>	Placing the timeline cursor on an edit point then pressing this key trims forward 1 frame from this edit point. If the timeline cursor is placed elsewhere, pressing this key moves the edit point to the current timeline cursor position and trims from there.
<N>	Placing the timeline cursor on an edit point then pressing this key trims forward 10 frames from this edit point. If the timeline cursor is placed elsewhere, pressing this key moves the edit point to the current timeline cursor position and trims from there.
< [>	Placing the timeline cursor after an edit point then pressing this key trims (ie 'tops') the start of the clip segment to the current frame.
<] >	Placing the timeline cursor before an edit point then pressing this key trims (ie 'tails') the end of the clip segment to the current frame.
<F2>	Displays/hides the paint palette which allows colours to be selected and mixed.

copyright © Quantel Ltd 2001-2014

Keyboard Shortcut	Function
<F8>	Shows/hides the optional one shot image corrector menu.*
<F9>	Selects Match Frame mode.*
<F5>, <Y>	Displays the Video Transition Menu that allows a cut, dissolve, wipe or custom transition to be selected.
<Alt>+<V>	Shows/hides voice over GUI functions.*
<Alt>+<B>	Starts/stops voice over recording.*
<Alt>+<S>	Opens the timeline **save** pop-up: press twice to save current clip to Clips Bin.
<Alt>+<X>	Closes the **save** pop-up without saving the clip.

Audio

Keyboard Shortcut	Function
< / >	Inserts an audio node.*
<F6>, <U>	Displays the Audio Transition Menu.*
<F7>	Displays the Audio Information Menu.*
<1>	Depending on focus, this toggles the timeline or Floating Clip audio track filter (A1) on/off.*
<2>	Depending on focus, this toggles the timeline or Floating Clip audio track filter (A2) on/off.*
<3>	Depending on focus, this toggles the timeline or Floating Clip audio track filter (A3) on/off.*
<4>	Depending on focus, this toggles the timeline or Floating Clip audio track filter (A4) on/off.*
<Scroll Lock >	Turns on the audio scrub play-out mode that changes the pitch of the audio to match the speed at which the clips are played or re-wound. With Scroll Lock turned off, audio snippet play-out mode is used.*
<Ctrl>+<A>	Depending on focus, this toggles the video and audio track filters on/off on the timeline or Floating Clip.*
<Alt>+<1>	Toggles the MLT FX timeline audio track filter (A1) on/off.
<Alt>+<2>	Toggles the MLT FX timeline audio track filter (A2) on/off.
<Alt>+<3>	Toggles the MLT FX timeline audio track filter (A3) on/off.
<Alt>+<4>	Toggles the MLT FX timeline audio track filter (A4) on/off.

Navigation & Playback

Keyboard Shortcut	Function
<Space Bar>	Starts/stops playing the clip edit currently on the timeline.
<→>	Steps the current frame position on the timeline clip forwards 1 frame.
<⇧>+<→>	Moves forward 10 frames.*

Keyboard Shortcut	Function
<Ctrl>+<→>	Moves forward 1 second.*
<Ctrl>+<⇧>+<→>	Jumps to last frame.*
<←>	Steps the current frame on the timeline clip backwards 1 frame.
<⇧>+<←>	Moves back 10 frames.*
<Ctrl>+<←>	Moves back 1 second.*
<Ctrl>+<⇧>+<←>	Jumps to first frame.*
<↓>, <S>, < ' >	Steps the current frame on the timeline to the next edit point (or next logged event)
<↑> ,<A>, < ; >	Steps the current frame on the timeline to the previous edit point (or previous logged event).
<J>, < , >	Plays the clip backwards from the current frame on the timeline. Repeated presses increase the speed by 1, 2, 4, 8, 16 or 32 frames.
<K>	Pauses the playing clip.
<L>, < . >	Plays the clip forwards from the current frame on the timeline. Repeated presses increase the speed by 1, 2, 4, 8, 16 or 32 frames.
<5>	Plays the clip forwards at normal speed.
<6>	Plays the clip forwards at normal speed from the current cursor position to the end of the current segement.
<7>	Jogs backwards 10 frames through the clip from the current frame on the timeline.
<8>	Jogs backwards 1 frame through the clip from the current frame on the timeline.
<9>	Jogs forwards 1 frame through the clip from the current frame on the timeline.
<0>	Jogs forwards 10 frames through the clip from the current frame on the timeline.
<Home>	Jumps to the first frame on the timeline.
<Page Up>	Zooms-in on the timeline around the current frame. Repeated presses increase the zoom.
<End>	Jumps to the last frame on the timeline.
<Page Down>	Zooms-out on the timeline around the current frame. Repeated presses decrease the zoom.

Undo & Redo

Keyboard Shortcut	Function
<Ctrl>+<Z>	undoes the last operation.
<Ctrl>+<R>	redoes the last operation that was undone.

copyright © Quantel Ltd 2001-2014

Bins

Keyboard Shortcut	Function
<Alt>+<←>	moves focus left on nested bins.
<Alt>+<→>	moves focus right on nested bins.
<Esc>	hides/shows all open bins on the desktop.
<F4>	refreshes the Server Bin.
<Ctrl>+<↑>, <↓>	selects next clip in bin.
<Ctrl>+<⇧>+<B>	switches focus to Server Bin.
<Ctrl>+<⇧>+<S>	selects Server Bin 'Areas' scroll box.
<Ctrl>+<⇧>+<T>	shows Server Bin clip naming pop-up (ie soft keyboard).
<Ctrl>+<Return>	shows the selected bin clip docked to the bin.
<Ctrl>+<⇧>+<Return>	shows selected bin clip docked to the bin as a flattened MLT with mixed down audio. *
<Ctrl>+<C>	copies a clip that is highlighted in the server bin to the local clips bin.

* Shortcut does not work when MLT FX is open.

Appendix C

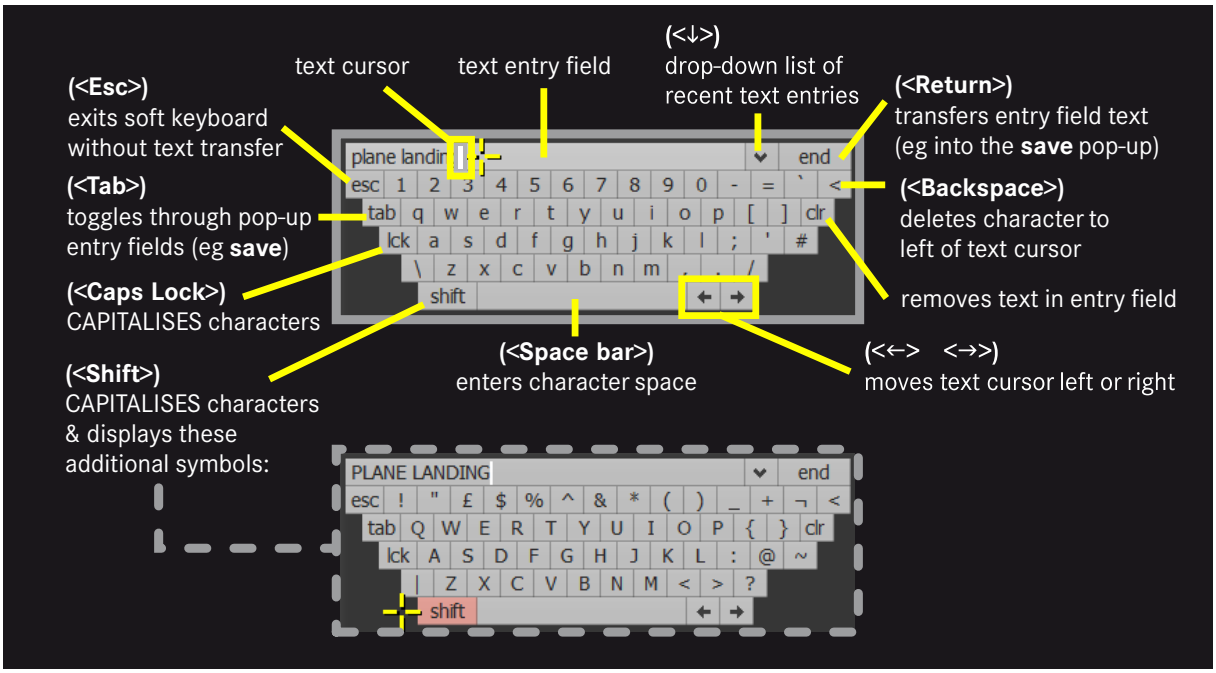
Menu Functions & Colours

In this guide, **bold** is used to indicate any GUI menu functions.

Boxes on the GUI are coloured to indicate individual function type and status:

pink — Pink boxes indicate enabled or selected functions. Most pink boxes toggle to grey.

grey — Dark grey boxes may indicate that the function is available but requires a video or key channel. Light grey boxes indicate disabled or non selected functions. Most of these boxes toggle to pink. Light grey is also used in blank fields that require text entry such as a name or category (eg the **save** pop-up). When a field is pressed, a soft keyboard appears allowing text to be entered:



The diagram above shows the soft keyboard functions with corresponding external keyboard functions in brackets.

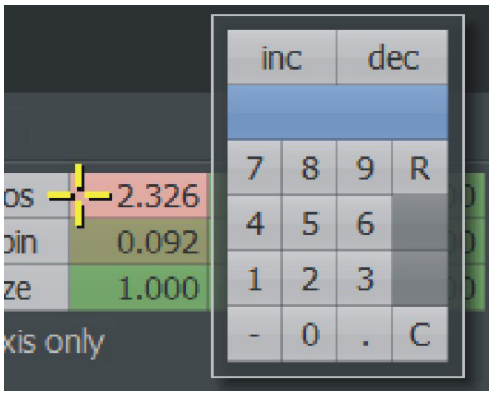
orange — Orange boxes indicate that an operation has been aborted for the indicated reason, or a settings clash, such as resolution or frame rate etc. It also acts as a reminder to undertake an action, eg to perform a render or add a keyframe.

blue — Dark blue boxes contain information that cannot be changed such as a function name or description. Light blue boxes provide scroll lists containing alternative selections. Press on the box and while continuing to hold, move up or down the list until the required item is highlighted. Release pressure to select the item.

copyright © Quantel Ltd 2001-2014

green

Green boxes indicate that a numeric value can be changed. If pressed, the box becomes pink and a numeric pop-up appears. When a change has been entered, the box becomes olive green to indicate this. Values can be changed by doing one of the following:



a Use the cursor to press the **inc** and **dec** boxes or the numbers on the pop-up. The new value appears in the blue box at the top of the pop-up. Tap on this box to transfer the value, then tap on it again to close the pop-up. If required, press the *C* box to clear the value, or the *R* box to reset the green numeric box to its default value.

b Enter a number on the external keyboard then press <Enter> to transfer the value and close the pop-up.

c Click and drag the cursor in a clockwise circular movement over a green numeric box to increase the value (you don't have to click the box first to display the pop-up) or an anti-clockwise movement to decrease it. You can also drag up or down to increase or decrease the value.

Specific numeric values can be entered using the following external keyboard shortcuts:

Keyboard Shortcut	Function
<B>	Inserts the biggest allowed value for the selected parameter
<S>	Inserts the smallest allowed value for the selected parameter
<D>	Inserts the default value for the selected parameter
<Space>	Inserts a zero value into the selected parameter.

Mouse & Pen Functions

Right-click or <Alt> + Tap

By default throughout this manual, it is assumed that the mouse is being used to control the cursor. If the right-click of the mouse is referred to, pen and tablet users should press <Alt> on the keyboard and tap with the pen.

Undo & Redo

The system stores the individual actions that have been performed in the Edit Application in an undo buffer. The previous actions can be selected from a list and then undone.

Selecting the **undo** box on the bottom-left of the menu area undoes the most recent action performed. Clicking and holding this box displays the other actions that have been performed. Slide to the required action and let go of the cursor. The box should now display the selected action to be undone. Click this box to undo the action (or press <Ctrl>+<Z> on the keyboard). You can redo an action by pressing <Ctrl>+<R>. A **redo** list also appears when you click and hold **undo.**

Appendix

copyright © Quantel Ltd 2001-2014